

# BOARDWATCH MAGAZINE

Guide to Online Information Services and Electronic Bulletin Boards

**Tom Jennings**

**and the  
International Fidonet  
22,067 BBSs  
with an Attitude**

**FULL INTERNET ACCESS  
FOR \$1 PER HOUR**

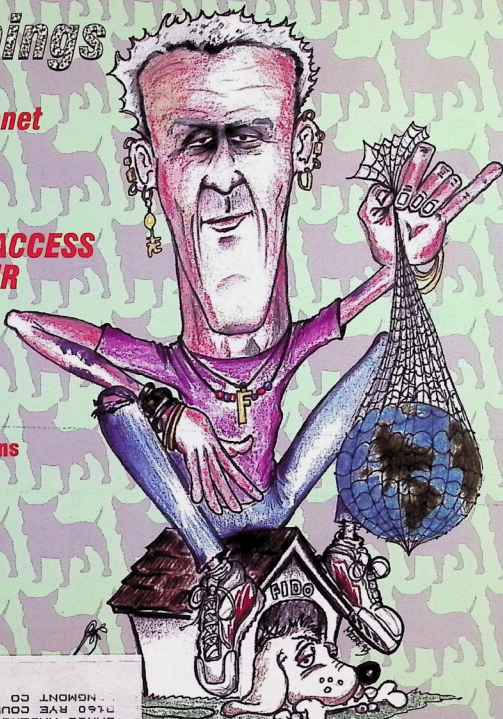
**BIX Adds  
Full Internet Access  
to Their 20/20 Program**

**ONE BBSCON '93**

**132 Educational Sessions  
Planned for August  
BBS Convention**

**DEMOS**

**Not What You Think -  
A New Cult Art Emerges  
Online**



\*\*\*\*\*MIXED CTV 80501  
COMPLIMENTARY 5262 1  
CHRIS ANDERSON  
1660 RYE COURT  
INGMONT CO 80501





# "I've Had It. We're Getting Hayes OPTIMAs. They're Affordable. They're Dependable. I Can't Go Wrong."



As modem prices continue to drop, it's important that

reliability doesn't. With the OPTIMA™ family, you can count on the quality of Hayes at very affordable prices.

Data modems. Data plus FAX modems. Board versions. Even portables. With speeds from 2400 to 14,400 bps, OPTIMA is Hayes quality at a surprisingly low price.

**SPECIAL FEATURES.** OPTIMA's Automatic Feature Negotiation selects the best combination of data speed, error-control, and data compression for throughputs of up to 57,600 bps to save big bucks on phone charges. Hayes® AutoSync eliminates the need for buying special adapter cards to communicate with PCs and mainframes. And to help avoid problems like data interruption and compatibility,



OPTIMA includes the Hayes patented Improved Escape Sequence with Guard Time and Hayes Standard AT Command Set. Just some of the features that helped

Hayes win the Computerworld 1992 I/S Brand Preference Award in 8 categories.

**NEW LOWER PRICES** **EXTRA BENEFITS FOR YOU.** All this low-priced reliability is packed with our famous Smartcom™ software to help you communicate easily in minutes. And it's all backed by a fast, efficient Hayes Technical Support team. Call 1-800-96-HAYES for your nearest dealer or product literature.

In Canada, call 1-800-665-1259.

Hayes quality, low prices, and peace-of-mind. Think OPTIMA...from Hayes.



Why settle for anything less?  
Hayes products have the computer world talking. More than ever.



Go Online with Hayes BBS; call 800-874-2937 or 404-446-6336.

©1993 Hayes Microcomputer Products, Inc., P.O. Box 103020, Atlanta, GA 30308. Hayes, the Hayes logo, OPTIMA, Smartcom, and the Hayes '302 Escape Sequence Patent icon are trademarks of Hayes Microcomputer Products, Inc.

# Explore the Internet-FREE!



## Attention Current Internet Users:

See what DELPHI can offer you! Stock quotes, Grolier's Encyclopedia, newswires, and hundreds of other services are just a few keystrokes away. Telnet to *delphi.com* and enter the username and password at right for a free trial.

DELPHI is the only major online service to offer you full access to the Internet. And now you can explore this incredible resource with no risk. You get 5 hours of evening/weekend access to try it out for free!

Use DELPHI's Internet mail gateway to exchange messages with over 10 million people at universities, companies, and other online services such as CompuServe and MCI Mail. Download programs and files using **FTP** or connect in real-time to other networks using **Telnet**. You can also meet people on the Internet. **Internet Relay Chat** lets you "talk" with people all over the world and **Usenet News** is the world's largest bulletin board with over 3500 topics!

To help you find the information you want, you'll have direct access to powerful search utilities such as "Gopher," "Hytelnet," "WAIS," and "the World-Wide Web." If you aren't familiar with these terms, don't worry; DELPHI has expert online assistants and a large collection of help files, books, programs, and other resources to help get you started.

Over 600 local access numbers are available across the country. Explore DELPHI and the Internet today. You'll be amazed by what you discover.

## 5-HOUR FREE TRIAL!

Dial By Modem 1-800-365-4636  
Press Return once or twice  
At Username, enter JOINDELPHI  
At Password, enter BW38

Complete details are provided during the toll-free registration

# DELPHI

Questions? Call 1-800-695-4005. Send e-mail to [INFO@delphi.com](mailto:INFO@delphi.com)



## Online Photograph Database

Durand Communications Network proudly announces the DC Net online photograph Database. This powerful multi-line database is 100% configurable to meet your application needs. Now you can create your own business database application or use one of our 'turn-key' applications to provide complete database services. With DC Net, you can have up to 16 databases online at one time.

### Features

- ✓ Multiple images and text on the same screen
- ✓ Move, resize or tile multiple images online or offline
- ✓ Terminal program is 100% RIPscript compatible
- ✓ Attach up to 10 photographs or text files to any record
- ✓ View up to 7 pages of detail for every record
- ✓ Print photographs online or offline
- ✓ Bill only successful database searches
- ✓ Offline viewing of images with DC Slideshow
- ✓ Support for BMP, PCX, GIF, TIF, TGA and CMP
- ✓ Most images compress to 8k-15k
- ✓ Shareware terminal program distributed royalty free



← RIPscript graphics

RealVision



Compressed Images (8k-15k)

Multiple Page Output

# DC Net

## v2.0

NEW

### AutoSell



### MatchMaker



WEST COAST

5276 Hollister Ave., Suite #405

Santa Barbara, CA 93111

tel: (805) 964-4899

fax: (805) 683-7690

EAST COAST

4601 N. Fairfax Dr., Suite #1130

Arlington, VA 22203

tel: (703) 527-3747

fax: (703) 525-9636

Visa / Mastercard Accepted

DEMO BBS: 805-964-2833 (8N1)

Durand Communications Network

# BOARDWATCH MAGAZINE

EDITOR'S NOTES - The Emancipation Constipation of Electronic Mail .....	8
---	---

## TELEBITS

CompuServe Adds Dinosaur Area .....	22
Galacticomm Establishes Showcase for Support Products .....	22
USA Today Information Center Intros Flat Rate Service .....	23
NuIQ Software Introduces Powerboard BBS .....	23
Database Door Works with Any BBS .....	23
ONE BBSCON Sessions Announced .....	23

## SOFTWARE NOTES

Looking At Shareware .....	32
Alpha Windows: A New Look for Your BBS .....	34
Your BBS and DESQview - More BBS for Your Money .....	35

LEGALLY ONLINE - Shareware Emerges from the Underground .....	44
---	----

OUT OF THE LAMP - Genie .....	46
-------------------------------	----

GRAPHICS ONLINE - DC Network - Database with a View .....	49
---	----

## MACINTOSH BBS NEWS

DA! Lineshare .....	52
Aloha Tabby .....	54
Five Mac Utilities .....	54
Mac Internet Stuff .....	58
Mac BBS of the Month .....	59

## INTERNET NEWS

Demos - Not At All What You Think .....	60
PCB-UUCP Version 1.1 Released, Connect PCBoard to Internet .....	61
Internet Society Election Results Announced .....	62
BIX Announces Full Access to the Internet .....	62

SCHOOLS ONLINE - E-mail Lessons in Diplomacy .....	63
--	----

## DIRECT DIAL

Psycho Bulletin Boards - Shrinktank and Dr. Shrink's Couch .....	65
The International FidoNet - 22067 Bulletin Boards with an Attitude .....	66

INTERNATIONAL FIDO NETWORK LIST OF ZONE AND REGIONAL COORDINATORS .....	69
---	----

INTERNATIONAL FIDO NETWORK LIST OF LOCAL NETWORK COORDINATORS .....	71
---	----

BOARDWATCH NATIONAL LIST OF ELECTRONIC BULLETIN BOARDS .....	104
--	-----



# Only One Multi-User BBS



# Gives You True Freedom\*

You started out to build a multi-user BBS. You had dreams about the service your system would provide, the problems you would solve and the money you would make. But you didn't bargain for the pile of hardware you would live with every day and now it controls your life.

As you compared the prices of software you missed the fact that the design philosophy of most BBS software forces many hardware decisions on you. ONLY TBBS allows you to achieve high performance with 64 high speed lines on a single CPU with NO custom hardware. And only TBBS gives you the option of integrated xBASE databasing with the TDBS expansion module and compiler.

True freedom is the ability to spend your time as you wish. Talk to real multi-user BBS sysops. You'll notice that only TBBS operators talk first about ideas, not hardware and software. For over ten years TBBS has provided them the freedom to design custom systems they can live with.

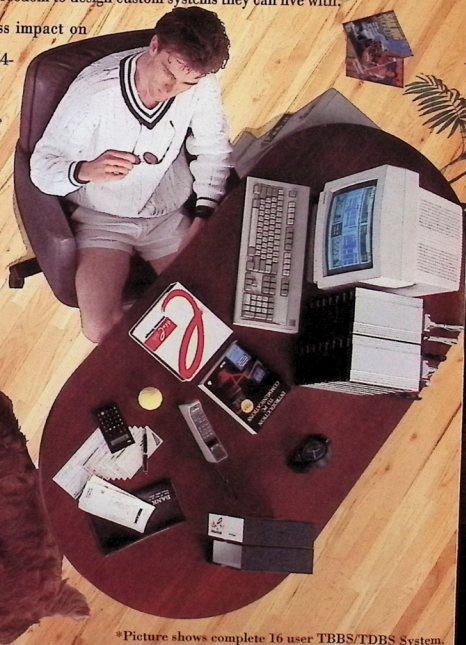
No one gets more capability with less impact on their life than a TBBS sysop. You can buy 64-user TBBS 2.2 for \$1,995 (32-user \$1,495, 16-user \$895, 2-user \$295) and use the money you saved on hardware to celebrate your success.

Call

303-699-6565

for more information  
and access to a demon-  
stration system.

  
**eSoft, Incorporated**  
15200 E. Girard Ave.  
Suite 3000  
Aurora, CO 80014  
303-699-6565



\*Picture shows complete 16 user TBBS/TDBS System.



## EDITOR'S NOTES

### THE EMANCIPATION CONSTIPATION OF ELECTRONIC MAIL

We've devoted a good bit of space over the last year or so to coverage of the Internet. I suppose for those wanting to know more about it, this is good news. For those that would prefer a bit broader coverage of such timely and pressing topics as Amiga BBSs, Whatever Happened to TRS-80, and Why A Single Line BBS Is Really Best, I guess it's not such good news. But I've heard from serious BBS enthusiasts who note that we're leaving the poor hobbyist BBS operator running a single line BBS behind.

I don't think we are, but the world, to some degree is, and it's not my place to fix that. There is a penchant for romanticizing the single line BBS as being low-cost. Actually, that is a fairly recent development. When Boardwatch began life, to operate a single line BBS could easily cost \$3000 - \$5000. And it generally did. Personal computers STARTED at about \$2000 for an XT and 20 MB drive in those days. The 2400 bps modem ran nearly \$500. A telephone line might have been a bit cheaper, but long distance costs were nearly double. Large hard drives would have been cheaper in those days if they had been simple gold plate. The point is, the single line hobbyist of yesteryear was pretty serious about the hobby.

Today, the prices of modems, computers, and storage devices has fallen through the floor. And the serious hobbyists of those days generally run pretty significant systems today. BBSing costs what it always did, you just get a lot more bang for your buck these days. True, some CAN now buy a computer for \$1000, a high speed modem for \$200, and run a single line BBS for what the pioneers had tied up in their modem alone. But they are NOT the hobbyists we started out covering in Boardwatch. It's a good place to start, but it isn't where we are going.

In any event, we are fascinated with the Internet, and it has little to do

with Gopher's, WAIS systems, or free phone. We think the Internet is very important to the future of bulletin boards, and we think bulletin boards are very important to the future of the Internet. And we think this symbiotic relationship is actually somewhat critical to the common online future of a generation. We think it strongly enough, that we don't at all mind being among the few that think it - for now. But a few words on why we think it might be appropriate at this point.

In the waning days of the 1970's, a fairly new development had the entire personal computing world, what there was of it, all awitwiter. There were several online services operating, including THE SOURCE, CompuServe, and shortly thereafter



MCI Mail. Anyone with a PC and a modem, could take out an account on these services, and for a fee send electronic mail. This mail did not actually look or behave a whole lot differently than e-mail does today. And everyone got just a bit excited about it all. I would have to believe that I read easily 200 magazine articles about the glorious age when we could all send messages near enough instantly anywhere for cheap, and communicate with everyone. There were futurists touting this to the point where we didn't want to hear it anymore. It all seemed very imminent - probably by late autumn. The problem was, you could pick any autumn you wanted for the next fifteen years, it never did quite happen.

What emerged instead was a concept that came to be known as "e-mail islands." If you were on CompuServe, you could send e-mail to anyone - as long as they too were on CompuServe. If you were on the SOURCE, you could also send mail to anyone, as long as they too were on the SOURCE. And if you were on MCI Mail, you really really COULD send e-mail to anyone, as long as they were on MCI Mail. You just couldn't send e-mail anywhere else.

And so we had another 200 magazine articles on e-mail islands, mostly discussing the technical barriers to connecting e-mail between systems. The reality was, it was all just text, and it was not a terribly daunting task technically - ever.

The reason we had islands was that we were "owned" - body, soul and breeches by these services. The REASON to join a service was to gain e-mail access to those who had already joined. And the MAIN service offered by these services, was in fact - their user base. There was very little to motivate these commercial services to "connect" anything. In fact, each thought, for some time, that if they could JUST get to the magic "critical mass", EVERYONE else would have to join them and they would own the whole ball of wax. They could charge each of us for access to ourselves. And we would be happy to pay it. In many ways, the customer was also the product - good work if you can get it. None of these plans ever resulted in any notable amount of cash for them, but future success was a pleasant thing to contemplate.

I actually tried to get MCI Mail to connect up to the BBS community for electronic mail in 1988. They would have none of it. "Why should we give bulletin boards access to OUR user base?" Duh-huh.

E-mail was basically a failed model with a failed future because no service could gain dominance, and it was all based on callers being chattel



- owned, bought, sold, and traded by these services. If one service won, we lost because we would have to dance to their tune. And if no service won, we lost because there really was no dance. We entered the 14th century of electronic mail with wars and rumors of wars, plagues and rumors of plagues.

A group of defense contractors, who actually used quite a bit of electronic mail, brought all the vendors together in 1988 and put the word to them "Connect, or we will be your COMPETITION rather than your customers."

The services got the message, and they all tried to appear to be working furiously on X.400 connections between their services. The smaller ones worked furiously, and the larger ones tried to appear to. You could kind of send messages from one service to another, if you didn't mind crawling through 400 yards of broken glass on your hands and knees to send a message.

Meanwhile, the Internet, much touted as starting variously in 1969, 1973, 1978, and 1983, actually DID get off the ground big-time in 1988. It's entire culture was based on a networking snub of the University and Academic sector by the Department of Defense years earlier, and as a result the National Science Foundation network carried a strong bias toward "including" everyone that was "excluded" in a prior life.

In fact, this culture of "inclusion" was so strong, that University Graduate students in Computer Science really only had one way to make an impression - find someone and connect them - by adding some software function or other to the UNIX or VMS systems available. At that time, you could get a UUCP connection to any University more or less by calling and asking. The National Science Foundation was actually funding some of the better work with grants and it became quite the thing to do. I do not mean to imply that this all happened by accident, there were some real visionaries in the heart of the process. But it was a process quite removed from the economic realities of commercial online services, and a very very different culture. Resource and net-

works were "free" for the most part. And everyone should be connected.

To the commercial systems, this was not quite beast, fowl, or fish. It was in their field, did and did not quite pertain to them, did and did not quite compete with them, and of course it was fascinating. A series of creeping connection experiments - initially by enthused backroom technicians (who had been students the year or so before) connected these services to the Internet through various "controllable/firewall" e-mail gateways. Gradually, it became a little awkward if your competitor had an Internet connection, and you didn't. Before the smoke cleared, the graduate students had effectively sneaked in to the switching room and hooked everyone up while no one was looking.

And in the process, the Internet itself, and more importantly the domain naming system of addressing, became the common e-mail backplane for the world.

What this means in my little narrow view of things is nothing less than the emancipation of people with modems. The domain name system for addressing e-mail has become the way it is done on a global basis. You can not only send and receive e-mail, but ultimately files of all kinds, join mailing lists, effectively create impromptu "bulletin boards" with mailing list management software a moron could write in a bad afternoon with LISP, LOGO, or BASIC. The islands are gone, and you can do it from ANYWHERE on ANY service, with the lone possible current exception of Prodigy at this point - and that not for long. Online services have to compete on price, interface, service, and ultimately, the INFORMATION CONTENT of their services, NOT ON WHO THEY OWN.

There are, however, a few minor remaining problems to tidy up first. Internet numbers are relatively meaningless - they subsume all that they touch and count everything that ever made a connection - even for a moment. But the commercial online services handle about 5 million people. Bulletin boards handle a little over 13 million - largely because they're cheap.

A number of people from within the Internet bus structure itself now desperately want to sell access to the Internet. But they have a few problems, not the least of which is a gross inability to do basic arithmetic but secondly a form of religious intolerance. While any number of operating systems are extant in the Internet, most of the "access" comes from the UNIX community. UNIX is a religion. It was never an operating system at all. It was a satire on an operating system titled Multix. But whatever. Some didn't get the joke and THOUGHT it was an operating system.

The interface to UNIX isn't an interface at all. It's a test. And UNIX aficionados actually perceive that the world should in fact learn UNIX and pass the test. They actually think we will all be better people for having learned it. Their current shining achievement is the Gopher and the WAIS, (we call these "menus"). We actually did a story recently on a very impressive service - impressive largely because someone had ACTUALLY built a menu with over 2600 linear entries. And they did this ON PURPOSE.

In any event, I talk with these people quite regularly, and it is not unusual for me to converse with an adult person currently operating a 32 port system who wants to discuss connecting all the K-12 schools in the country to the Internet. I never know if they are kidding or what. I have some reason to believe that there are over 16,000 school DISTRICTS in the United States. There are probably, and yeah, I'm just guessing, something over 80,000 SCHOOLS in the United States. That sounds like maybe a million or more CLASSROOMS. We're not down to students yet by some distance. And it can take several weeks for these guys to get BOTH your name and password entered into a machine and get it right before the third try. They're going to hook up 80,000 schools with full IP links? Rub a lamp.

And I have dealt in an uncomfortably direct fashion with REAL K-12 teachers trying to learn to use a BBS as we know it. Some do better than others, but the kindest thing I can say is that they are NOT going to learn the vagaries of the UNIX com-



mand line interface in any significant or even noticeable numbers - not in this life anyway. String wire and routers until they blacken the sky, you haven't connected anyone yet until they can use it. But I gather these people believe that all in the world necessary to accomplish this feat is a government grant with sufficient zeros.

One reader actually sent us a flyer from a Maine educational BBS that had consumed some \$180,000 in grant money used to operate a single line Macintosh BBS with 2400 bps modem and no graphics and had had OVER 400 CALLERS log onto the system during the period. Be still my heart.

Real K-12 teachers that HAVE accomplished real networking for schools that I know of, have all used BBS technology - usually paid for out of their own pocket. Some pretty interesting connections to the Internet have been forged, and I would expect more of that, but I've never heard of any serious K-12 education that was actually in practice beginning with "Class, this is the vi text editor."

It seems pretty clear that bulletin boards need to mount the tools to plug into the Internet, at least for basic electronic mail and Usenet News Groups. It's equally clear to me that the Internet needs an interface capable of dealing with a large number of people and allowing them to perform basic e-mail operations, participate in mailing lists, and shared message conferences after the fashion of UseNet News Groups. They should be able to learn this interface reasonably easily, and use it to communicate globally. Perhaps an occasional telnet to an online library card catalog.

So I see a natural marriage between the Internet and electronic bulletin boards. Schools could individually experiment with various BBS packages and interfaces in fairly modular and relatively inexpensive fashion.

And within two years, I would find it unusual to see a BBS that did not offer some form of Internet access - all things taking their natural course. I believe this strongly enough to actually do some coding of my

own, after having done none for some eight years. And many others are at work as well. One of the technical challenges of the next few years will be connecting bulletin boards to the Internet, while retaining the comfortable BBS interface those 13 million people are accustomed to.

The regional service providers that figure out that some 53,000 bulletin boards actually DO make a pretty nice market after all, and one they COULD conceivably service, will do rather well for themselves as well. Some, such as Holonet, Colorado SuperNet, Netcom, and NovaLink are already. In order to service thousands of schools, and millions of individuals not inclined to better living through UNIX, the Internet needs bulletin boards.

And ultimately, through the use of offline mail readers and other desktop niceties, the early dream of global e-mail, for cheap, from the end users desktop itself, will become a reality. If you don't like the service from one commercial service, bulletin board, or whatever, you should be able to change to a completely different one in about an hour and not even have an interruption in the flow of mail from your BRING-BACK-BURNT-UMBER-CRAYOLAS mailing list. And the interface should be your own from among dozens if not hundreds to select from. And the user sets up the accounts THEMSELVES without a special dispensation and personal supervision from the "system administrator".

So I very plainly see the Internet Connection as a key part of the pioneer level of BBS activity - which is where our heart and mind is now and in the future. As such, it will continue to play a central role in Boardwatch coverage for some time to come. I also think it is an area of interest among our readership in Universities, corporations, and pioneering BBS operators.

There is only one remaining method to abort this electronic Valhalla and recapture/re-enslave the modem masses. And that is through legislation. The current Congress, and the current Clinton Administration, are in fact control freaks and very susceptible to any suggestion of where or how to control the citizen body

politic. The telephone companies, the cable tv companies, and the commercial services will all see this as the way to secure a business by legislation. The next play is for an unholy alliance between government and these large companies to legislatively restrict electronic mail to a relatively few "distribution points" that can be easily monitored and controlled "if necessary for the safety of us all" of course, and to the profit of a handful of large services.

Ultimately, the nature of electronic communications, and the people in it, will cause this to fail. But if you see it raise it's ugly head in the next few months, I do hope the online community snaps it off at the neck anyway just to drive the message home.

E-mail wants to be free.

Jack Rickard  
Editor/Publisher  
Boardwatch Magazine

---

## LETTERS TO THE EDITOR

---

Address Correspondence to LETTERS TO THE EDITOR, Boardwatch Magazine, 8500 West Bowles Ave., Suite 210, Littleton, CO 80123, or by e-mail to [letters@boardwatch.com](mailto:letters@boardwatch.com)

Dear Jack,

I'm back again on another round of philosophical thoughts set in motion by your excellent writing and far-ranging concerns. In your eloquent reply to Larry Gauper's letter in the March issue of Boardwatch, you expressed the hope that the emerging global electronic village, with its attendant international e-mail, would foster the rebirth of correspondence literacy, that the ability to write with a "fine hand" would re-emerge. I share that dream with you but I despair of ever seeing it realized.

There has been an experiment in progress on a large scale for at least a decade that unwittingly has addressed the issue head-on. The gigabytes of e-mail piling up on the hard disks of BBSs world wide contains a vast amount of poorly written

drivel and a small amount of outpourings from sick minds as well. Within this mountain of trash are genuine gems, thoughts expressed with wisdom, style and old fashioned skill, whether they are in the general realm of human communication or directed towards a specific technical issue.

But such quality in the morass of e-mail is rare. Why? I offer several reasons and some psychological interpretation. The temptation to instantly compose a message while on-line, either in reply to someone or just one's "brilliant" thought of the moment, is almost irresistible to those of us mechanically adroit enough to be confident with our keyboards. We therefore do not think before we write. That would take additional valuable time and a second call to deliver our message. Computer technology can foster the worst in us because, once the requisite mechanical skills are married to a rudimentary technical knowledge, so much can be done so fast. And that is exciting to the immature, conditioned-by-TV person who needs the rush provided by instant feedback. (Isn't that what we get when seeing our priceless words flow across that electronic screen?) E-mail garbage reflects "where we are at" as a culture and the display is depressing.

Why do we respond as impatient adolescents in so much of our electronic communication? That is a question it would take a book to address but a short brief take might read like this. As you said in your reply, our NEA educators have given upon teaching the formal rudiments of reading and writing. Our teachers are at least two generations deep in having been drawn from the bottom 20% of our high school student population. As a former professor for 21 years at a teacher's college, I speak from experience. TV as the primary baby sitter promotes an addiction to a life lived in 30 second time frames. Neither TV, VCR's nor the idiot level computer education taught in the nation's elementary, junior and senior high schools promotes any understanding or competence with technology. Button pushing can be quickly learned by rote to get the desired result, a rapid fire media blitz. Inexpensive hand calculators did not save math education for this

very reason. Their officially sanctioned, ubiquitous presence substitutes the understanding of mathematics with rote button pushing. The hope of teaching the art and process of mathematics went into oblivion. Not only are most students ignorant of any technology, they have no wish to learn it and are decidedly bored and impatient with those who might try to teach it. Why? Because they are singularly unprepared to be taught and the attempt brings forth feelings of threat, self-doubt and defensiveness. Not only can't Johnny or Mary read and write, they cannot handle a science or math at anything approaching age-appropriate competency. As for history and culture, the same. The immediate high of the instant media experience suffices for the moment, as does the rush induced by the sugar or salt high from junk food. When the high quickly wears off, it is instantly clear where to go to experience it again and again. So much for the great virtue of accessibility.

There are many individual exceptions to this sad state of affairs: brilliant, highly schooled young people who are living exceptional lives. But the critical mass in this culture is elsewhere and it determines the primary evolutionary direction of this society. The surveys and statistics are exhaustive, decades deep and solid. Perpetual adolescence has become a nation-wide life style: ignorance is bliss. "Adult" and "maturity" are dirty words, not just in adolescents but in many of the twenty- and thirty-somethings.

In the midst of this cultural climate we find the BBS world and the Internet. Yes, "the concept of powerful and poetic writing is completely and totally beyond the current debate" as you so evocatively stated. The ability of Americans to easily reach into Eastern Europe, Asia and beyond and contact different cultures via the Internet will not promote increased literacy and maturity of knowledge except in the exceptional few. It will reveal us as we are; we don't even bother to learn their languages. Hopefully the embarrassment will not be too great before many of us take a second look at ourselves and begin to slow down, think before we speak or wrote and start to reacquire the education denied us by an

educational system captivated by the adolescent ego, status, power and the preoccupation with the endless politically-correct beauracracy. I completely share your feelings about the NEA.

Cyberspace and the computer world do not exist in a vacuum, isolated from the culture at large, as you well know but few others seem to really understand. "Dumbing down" can only go so far, some realities are genuinely complex at the bottom line and require the attention and creativity of thoughtful committed adults. That degree of development is not necessarily achieved by acquiring a degree from some institution of higher education, which often is not worth the paper it is written on, considering the lower standards of education found at the college level in the past few decades as well as at the high school level. Average SAT scores have dropped from 975 in 1960 to 899 in 1992. Powerful and poetic writing is a case in point, be it attempted on vellum, parchment or via the Internet. Jim Thompson's article, "Running Your BBS Like a News Service" in your April issue, is a sad case in point. Certainly a competently crafted piece of brief journalism but the overall point is that market forces demand adherence to a communications style which I obviously find abhorrent. The recommended approach would seem to grovel before an immature audience with little attention span, very limited vocabulary and life lived in thirty second time bites. But then the almighty \$\$\$ is everything isn't it.

The reality of the Internet is teaching us once again that everything is interconnected. A comprehensive solution to the literacy problem we are wrestling with is beyond the scope of Boardwatch to discuss; indeed it might be beyond the scope of the Clinton-Gore administration to influence. However, elements of a solution are in motion with spontaneity and integrity. Rare individuals such as yourself model the best possible, not because you have chosen to do so for educational reasons, but simply because that is your true nature and your professional life is lived out in a public media context with power and persuasion. You have a very rare quality Jack, the intuitive wisdom to truly know that



everything is connected. Because that is a given, you reveal that simple truth numerous times in every issue of Boardwatch. The ongoing discussion of Cyberspace, be it a highly technical issue or not, resides within a context which makes continual reference to the society at large; technocratic myopia is not tolerated or even implicitly recognized.

The second element of the solution that is active is the very existence of the Internet itself. Joseph Campbell convinced himself that our times need nurturing mytho-poetics as much as did past ages. That need, he believed, was timeless, universal and could not be set aside for intellectual reasons. A highly mistaken scientific analysis which dismisses religion is merely evolved superstition. However, he did not believe the myths of the past could serve the cultures of our time and the rapidly arriving future, albeit they have great lessons to teach and can be adopted by some individuals within their private lifestyles. He saw advanced technology as not only the mechanistic underpinning that would run global beauracracies, be they government or economic, but a key element in the spontaneous creation of new myths. The adolescent delusions of so-called "virtual reality" are not the point; the reality of the Internet is. When all is said and done, when we confront individuals on the other side of the globe who we may not be fully prepared to understand in historical or anthropological terms, we are nonetheless quite prepared to relate to them in the one realm where educational preparation is irrelevant. That arena is daily life: the psychological underpinnings of relationships, birth, death, dying, war, career, success, failure, etc. The Internet is bringing us together in a mythic web of new relationships and the global electronic village will find a commonality in the rituals of daily life. After all, such things are archetypal as both Joseph Campbell and Carl Jung have said. The human enterprise is a singular adventure underneath the encyclopedic detail and diversity of culture, time and place. Technological competence is essential, not so that we may do more business work with greater efficiency and profit, but so that we may put the technology in the service of the human enterprise and the mythic

reintegration of society.

Sincerely,

Ben Blumenberg  
benb12@aol.com

Dear Ben:

I gather you didn't have time to write a "short" one? Actually, I agree with many of your points. I would like to think I have a somewhat more optimistic view, and if I do, I suppose I should defend it a bit.

First, I don't hold up Boardwatch as an example of literary effort, nor electronic mail as a panacea to our educational ills. But I can't agree with your apparent feeling that our failure to teach is caused by students failing to learn. I read something similar that stated that the leading reason small businesses failed within the first five years of operation was due to a lack of money. You can't argue with it, but you puzzle for days why anyone would spend time coming to such a non-conclusion.

I was raised in front of a TV, I thought peanut butter and kool-aid made a GREAT lunch, and the ragged little band of half-starved nuns responsible for the more valuable parts of my education, were doubtless widely unimpressed with my devotion to learning, scholarly demeanor, or study habits at the time. I was somewhat less than blissfully attentive to my studies. Picture class clown with an attitude. But they "taught" me to learn, with a wooden pointer when necessary, despite my high sugar, high salt, TV-besotted carcass. I might note that they were a little unconcerned with my feelings of self-worth, self-esteem, environmental awareness, or home situation. We coughed sentence diagrams or caught hell and Jesus was left responsible for our immortal souls.

Delineating all the ills of education leads to a more or less hopeless state of affairs. I used to very "rightly" enumerate the ills of the world to the point of physical illness. But I've been astounded at all the thoroughly "intractable" problems of our times, that weren't so intractable after all. The inflationary spiral, the inevitability of the communist expan-

## BOARDWATCH Magazine

ISSN: 1054-2760

Volume VII, Issue 8

August 1993

Copyright 1993 Jack Rickard

All Rights Reserved

### Editor/Publisher

Jack Rickard

### Contributing writers

Bill Gram-Reefer  
Lance Rose  
Jim Thompson  
Michael Chapman  
Donn King  
Julia Wilkinson

### Advertising sales

Charlie Moore

### Graphics Design

Charlie Moore

### Subscriptions/Circulation

Rob King  
Todd Melka

### Technical Operations

Gary Funk

### Newsstand Circulation

Martin L. Shafkowitz

### Editorial Offices

8500 W. Bowles Ave., Suite 210  
Littleton, Co 80127  
(303)973-6038 Editorial  
(303)973-3731 Fax  
(303)973-4222 BBS  
(800)933-6038 Subscriptions

### Electronic Mail

Internet:  
jack.rickard@boardwatch.com  
FidoNet: 1:104/555

sion, the inescapable shortage of petroleum products, were all documented to the point that there WERE no solutions - only causes. We just had to live with it. But those problems all went away - some rather suddenly. The world and the people who live in it DO have a remarkable capacity to change. We just have a very poor capacity to PREDICT change.

Your characterization of the world of e-mail as a wasteland is of course unassailable. You have to wade through a lot of manure to find those gems you refer to. In the macro, there are rarely "forces" as agents of change we can point to with prophetic accuracy. But some generalizations can be made. If catching a little tan in front of the one-eyed TV monster is the sum objective of our waking hours, writing is not likely to be valued as a skill and realistically, there is little point in learning it. On the other hand, out of all the manure of the electronic mail heap, people are trying to communicate, and there are winners and losers. Those that can e xpress themselves colorfully, powerfully, and persuasively do well - some very well. Those who can't are reduced to hurling invective and obscenity in frustration, and generally do poorly. I'm going to guess that over time, what separates the winners from the losers will become evident. And writing well will become a valued skill on a wider base - to a greater degree than it is now. That is NOT to say that everyone will write a few e-mail messages and by that act resurrect Mark Twain incarnate. But as a gentle long term force, it could change things dramatically. It is communication by participation, rather than by absorption as in TV.

And I think the time is coming when people will want that education. But the cure will come in surprising ways. Have you wondered why there is now some form of technical "convention" happening literally every day now in this country, with registration fees often in the \$800 range for a one or two day course? And if you don't register early, you can't get in at all? There are an enormous number of companies springing up that do nothing but present seminars in different cities, more or less on a continuous basis - again, EXPENSIVE seminars. And they work. I just sent

our advertising salesman to one of Brian Tracey's day-long sales things. He returned RAVING about it. This week, the administrator for ONE, Inc., is at a similar seminar about conventions. And I've got two people at a two-day seminar on color production. Shouldn't our Universities have played a role here? God forbid they slow by a half-step in their insatiable quest for government grant or research money, but they are less than a decade from becoming totally irrelevant to adult education. The adult "schoolroom" of the future is in luxury hotels and taught by people who know how - not the "educator class."

Likewise our K-12 world. We are at the brink of our last chance at fixing it. Voters across the land want to give it one last chance to get well - generally rejecting voucher systems etc. for the present. But it's all on a much shorter fuse than the NEA imagines. And people will adapt. If it ever gets out that there is any way parents can get their children (however unwashed they may be) educated, and thereby a bit of an advantage in life, the fall of the iron curtain will look like it happened in slow motion glacial erosion by comparison. Unfortunately, it means abandonment of the concept of public education "free for all" and a return to education for those who can afford it - the direct consequence of allowing "public servants" to hold our children hostage for money, which is where I think we are now.

Jack Rickard

Jack - THANKS AGAIN!

I was just re-reading your March issue of BOARDWATCH again. It has been a great help in putting together our most recent project - an Educational Access!

One of my callers (a teacher), told me that our local schools are "behind the times" in their computer labs. So, being the super BBS we are, we donated some modems to the local school district. They had the computers, wanted to know more about telecommunications with computers, so we obliged in the best way we could. They've been most appreciative, but the teachers seemed to be a little bewildered at what to do with

the modems after they were installed.

So, being the super BBS we are, we went into the schools and showed a few of the computer lab teachers how to use the modems, as well as using several of the local BBS's and services.

Corpus Christi has a number of great BBS's and although the teachers were personally interested in them, they felt that none of them had what the school was looking for. On the other hand the larger services such as Compuserve or Prodigy were too expensive for them to use.

Once again, being the super BBS we are, we began our current project - putting together educational access that the schools in our area could utilize in the computer lab classes. In no time at all we had a basic access that the labs could use. They were quite impressed with the access we put online, as a matter of fact, we've since been contacted by 9 other districts throughout the state requesting the same access.

This is something we're donating to the districts. One of the main reasons we're donating this service is the cost to us has been reasonable. The initial setup didn't require us to look any further than our own libraries for resource materials! All the educational tutors, message areas, message networks, and file libraries were already on our system. It was very simple to add an area on our board that they could access, and the base materials were nothing more than you would find on most BBS's.

Since then we've been working with shareware authors, local sysops, and computer retail stores, to expand our educational access. Your March issue of BOARDWATCH has been a great help in giving us some direction and additional ideas. This was not a planned out project so we've been able to get some good guidance from the articles.

However, I might make one suggestion to your Sysop readers. They may want to get involved with the communities in their area. In our case it was helping out our schools, but any type of community involve-



ment would make a difference. Why? If our area is any kind of representation of the rest of the nation, the general computer using public is still relatively un-informed about BBSing. I'm constantly having people ask me what a BBS or Online Service is. Since we've started the Educational Access project, we've been in the local newspaper, and on a couple of the TV stations. It has done wonders to bring BBSing more into the public eye while doing a good deed for the community that supports us.

I'm a firm believer that Sysops helping Sysops can bring BBSing to the forefront of telecommunications.

Thanks again....

Wade H. Fjeld  
Computer Data Services  
Corpus Christi, Texas

Wade;

Sounds like you are operating where the rubber meets the road on both the BBS and educational networking fronts. We're hearing from others as well who have found community service projects rewarding on all fronts. It has always been incumbent on those online to pass on the techniques to those just joining the party.

Jack Rickard

Dear Jack!

Love your magazine!!!!

I just signed up for DELPHI's 5 free hours. I saw their ad in Boardwatch. Actually the ad didn't sell me, it was National Public Radio. This morning they replayed a segment from an earlier broadcast about real-time, two-way voice transmission on the Internet. I couldn't believe it.

Sure, I've heard about that other guy who was planning a radio program for Internet and even he talked about real-time questions and answers with computers, modems and phone lines. I figured that a recorded radio show would be possible, but would eat up an extremely large chunk of memory.

How does this real-time, two-way stuff work? I'm so curious I can hardly sleep at night. Is it expensive?

Do I need a special modem or special communications software?

I was a member of CompuServe for almost ten years, but now Delphi has my attention. What do you think of Delphi? I joined because of it's connection with Internet, although I know very little about it, in fact this is my first message sent via Internet. (I hope it makes it.)

I've been a Ham since 1988, worked in television since 1983, studied film & video since 1977 and enjoyed photography since my introduction to it in 7th grade.

I love any and everything having to do with communications. If you can't reach me at home you'll get my answering machine, at work my voice mail, in the car on my cellular or simply dial my pager. Of course if I have my handheld Ham Radio on you could give me a call or maybe I could talk to you on my High Frequency Ham Radio, no matter where in the world you were. Oh yes, don't forget about my Packet Mailbox. I use that to send and receive messages to other Hams all over the world. If you need to fax me use my home number, (It switches automatically.) Or you could even leave me a message on a local BBS or the private BBS that I operate on a second line. Oh, I almost forgot about the good of U.S. Mail. And now I finally have an Internet address.

See what I mean?

What does my wife think about all of this? Sorry, she can't be reached for comment.

Keep up the good work!

Tony Carlisle  
cheapskans@delphi.com

Tony:

What do I think of Delphi? Well, it's been around approximately forever. Wes Kusmaul started it I believe as an electronic encyclopedia and is hailed as one of the visionaries of the age. I think they've been a little bit lost, wandering around in circles the last few years, but they have developed a core of followers and it has always been a pleasant service. More recently, they seem to understand

the Internet link better than any of the other online services. Today, they probably represent the best bargain going for an individual caller to gain full telnet/ftp access, and a little help using it, available in the industry. I'm going to guess they've found their niche and we will be seeing a lot more of them in the future.

One of the unique things they are doing is harnessing some 300 already very competent forum leaders as "guides" to the Internet. These "sysops" are basically going out and finding anything on the Internet of interest to their particular specialty (photography, communications, etc.) and tying it in with the forum itself - to the point of actually making their forum menus a type of Internet "gopher" to link out to other services. They have plans for a Windows interface to the service. With this interface, with their SIG leaders acting as tour guides, and with the full capabilities of Internet including telnet and ftp, along with an access rate of 20 hours for \$20 per month if I'm not mistaken, what you have here is a guided, interfaced tour of the whole online world for \$1 an hour. If anyone wants to go up against that, they're going to have to pack a lunch. And if the other services "don't" want to go up against that with something competitive, I think Delphi/BIX may emerge from relative obscurity among the commercial services to become a leader.

As to two way voice, you mean like a telephone? The frontier of technological development is by definition a field of experimentation inhabited by good ideas implemented badly, stupid ideas implemented elegantly, and hopefully the occasional brilliant idea implemented elegantly as well. I claim no special ability to be able to tell one from another. We'll see a lot of strange things under the guise of multimedia e-mail - video, voice, graphics, sound, and for all I know, Oragami. Some will be expensive ways to reinvent the wheel, but others will be new wheels. Yeah, I'm kind of a gadget guy too.

Jack Rickard

# Is your group just standing around?

## **Get them the information they need with MMB TEAMate™ Bulletin Board Software**

Meerkats instinctively work together. People don't. We can't guarantee your group will cooperate as well as the Meerkats but with TEAMate they will have access to the information they need, when they need it, wherever they are.

Since 1985 we've been building easy-to-use multiuser communications software designed for commercial applications. In fact, MMB TEAMate is the only bulletin board software with the features and flexibility that can accommodate the widely differing communications requirements of your employees, customers and suppliers.

## **TEAMate Servers**

Server versions of TEAMate are available for SCO, SUN, IBM RS/6000, HP-UX, DEC, AT&T 3B2, Sequent, Data General, Motorola, Stratus and Tandem. Servers support both client and terminal emulation access.

## **TEAMate Clients**

GUI Clients for Windows 3.1, Macintosh and Motif will be available in the third quarter of 1993. With the client development kit, customized clients can be developed for special requirements. The client license permits unlimited distribution of the runtime client.

Call for complete information and access to a demo system.

# **MMB TEAMate™**

Call (800) 832-6022 or (310) 318-1322 Fax (310) 318-2162 MMB Development Corporation, 904 Manhattan Avenue, Manhattan Beach, CA 90266



Jack,

I've just purchased my first copy of Boardwatch Magazine and am hooked. Your editorial in the June 1993 edition regarding the downside of the National Information Infrastructure opened my eyes to something I had never considered in my electronic appetite for "More, give me more - and 'Put it online - full text.'" I found your editorial so thought-provoking that I gathered the whole family together late last night to read it to them. I've spent a life-time being irked with the news media for its bias and constant reinterpretation of everything, but I never stopped to consider how much worse the alternative would be.

I would very much like to have permission to quote your editorial on alt.politics.reform, with proper credit given to you and Boardwatch Magazine. Please let me know if you would object.

Char Roberts  
croberts@holonet.net

Char:

Permission granted. I had the same feeling of surprise myself actually, which is why we did that editorial. It is very odd to hold a particular position strongly over a period of time, and with one minor, subtle change in the world, find all your mental furniture suddenly rearranged. But it's happened often enough that I'm not nearly as wed to my own opinions as I once was. They're still better opinions than I can get anywhere else at a price I can afford, but I do now allow as how they might change in a changing world. I often yearn for the days when I was 15 years-old and knew everything.

And I do still think better communication between those that are interested and the sources of information is one of the gifts of this emerging age of many-to-many communications. But we need to be aware that it has its costs, and dangers too. Eradication of the existing information structure and pecking order may not be precisely what we're after here.

Jack Rickard

Jack

You have really got me hooked! I have been BBS'en off and on for the last couple of years, but I really didn't see the power of E-mail or BBS type systems until I discovered Internet via a recent article in your magazine. I had no clue as to what or how to use Internet, but I was interested in receiving info about the economy from the President. I made a few phone calls around town to find out what Internet was, when my co-worker at work asked me what I am doing. Well, when I told him, he immediately began to educate me in Internet. After he gave me his technical orientation, he told me I was already connected to Internet at my desk..."I said Huh! You mean by using my modem." "No!" He replied, "Our company in connected through Office Vision". "Well...I didn't knooov", I said. It turns out that our in-house E-Mail System formally IBM Profs, now IBM Office Vision which runs on our Mainframe can send and receive only Email from the Internet. I told him I have the Internet address of Bill Clinton that I got from Board Watch Magazine and I would like to receive his Economic Policies. It's not that I am an expert in economics, I just want to know what his is doing...after all we do pay his salary.

We sent the note, and just a few moments later I received a reply. I was shocked and very impressed at the speed and return reply by the Presidents Email System. I then began to send and receive mail like a kid with a new toy. Internet puts new meaning in reaching out and touching someone.

In my department, I work in a very small specialized part of networking and the more I learn - I learn how much more that I don't know. Now, I reach an all time High that I am receiving more information than two people can possible read in a day. What I was wondering is if you had any special tips or techniques in wading through the masses amount of information with out missing that small bit of important information.

Well, since I have discovered Internet, I am connecting to all kinds of systems and my information processing has doubled. I really don't

know if I should thank you or curse you. If you do have any special tips I would greatly appreciate hearing them, before Curious George (ME) goes off and bangs another large game of information that he can't eat...Thanks Again!

Thank You!  
Patrick Enlow  
T75PLE1@NJE01.IBMMAIL.COM

Patrick:

Welcome to the firehose. It is a distinct blessing, and a notable curse. But it does change the way we do things. Tips? Oh, there are a few, but too few I fear to let you regain a normal life as you knew it. One mistake that I see made all too often has to do with implied immediacy. E-mail DOES happen fast. So if you receive e-mail fast, you should hurriedly write a response and send it off fast, right? Actually not. Some e-mail is like cheese. Read it, let it sit awhile, and read it again. Then write a reply, let IT sit awhile, and read IT again. Then send it. If the whole process takes a whole day - or even two, they'll get over it on the other end. It's much easier to produce the right response first, than it is to retract and explain later. Similarly, e-mail is for your convenience. If you don't read any of it till the end of the day, that's as good a time as any. Don't let the apparent pace of electronic mail dictate your pace of dealing with it.

Secondly, not all e-mail warrants a response. There are a lot of people with keyboards out there, and often they have no adult supervision. You can reduce stress levels dramatically with the N for NEXT key. I do not personally believe that receiving an e-mail message obligates me to respond to it.

E-mail is a communication tool, not a psychoanalyst or therapeutic means of blowing off steam. If you send e-mail to a product vendor seeking help for some situation, if you start off with a list of sins and "tell them off", do not expect better results than you would in person. You may feel better, but you've probably hurt your cause.

Despite the fact that when you do respond it is "just" e-mail and not in

# AQUILA BBS

Chicagoland's Largest System

Since 1988

Aquila has filled the computer screens of Chicagoland for over three years, growing from a single modem line system in 1988 to over 25 lines in 1992. Aquila's success over the years is due to the enthusiastic support of our users. New callers are encouraged to download our current file list and electronic mail conference listing. A short guided tour highlighting our system services is also available for new users. All of our information is automatically mailed to you to read in the comfort of your home or office. So pick up your modem and give us a call! You will find Aquila BBS to be the most valuable bulletin board in your dialer.

## Programs - Thousands On-Line

Give your modem a workout! We add new shareware and public domain programs everyday. Over 400 programs are added weekly. With more than 5 Gigabytes of on-line storage, we stock over 50 thousand programs. Aquila makes it easy to find the programs that are important to you, by organizing them into 120+ file directory categories everyday.

## We cater to the Windows User.

With Windows becoming the most popular user interface around, we make an extra effort to keep you supplied with the latest programs and enhancements by devoting a special conference area just for Windows containing 2000+ files organized into 40+ file directory categories.

Our organization and the latest programs make our file areas the most popular around. These are just a few of our most popular categories available:

Diagnostic Utilities  
System Enhancements  
File Organizers  
Word Processing

Computer Games  
Music and Midi Sound Files  
Computer Animations  
CAD Drawing Utilities

Business - Finance - Tax  
Novell and Lan Utilities  
Database  
Programming

Icons - Icon Managers  
Wallpaper - BMP's  
Multi-Media Related  
Fonts - Font Utilities



The AQUILA BBS Team (Left to right: Kevin & Kristy Behrens, Steve Williams, Chris Babb)

## New User Information

All first time callers receive by mail, our printed 'New User Information' and 'E-Mail Conference Directory' guide, as well as a 'Quick Command Guide' to help you get the most out of Aquila. The new user information covers system services such as answers to commonly asked questions, USA Today, Boardwatch Magazine, and Electronic Mail off-line readers. The 'Quick Command Guide' is a desktop lookup for using Aquila commands.

## Aquila Starter Kit

Callers that are new to modem communications will find 'The Aquila Starter Kit' a great time-saver. Easy for the beginner and helpful for the expert! This \$39.95 kit includes the following:

Procomm (communications program)  
Full documentation for all BBS commands  
Off-line file browsing program

Our complete file listing on floppy disk  
Off-Line E-Mail Reader  
Three month basic membership

## Around The World E-MAIL

Over 450 Conference Topics



We currently echo to and from ILlink, RIME, Fido-Net and Throbbnet with more to come in the near future. You can get virtually any question answered here and join in on lively discussions with people from across the country and around the world. We also publish our own 'E-Mail Directory' that is sent to all users of Aquila BBS. This directory lists all of our conferences by category and gives a brief description of the topic of each one. Here is a small sampling of over 450 interesting topics that we offer:

General Discussion  
Computer Related


Vendor Support  
Programming Languages

For-Sale  
Current Events



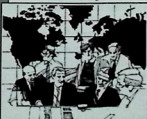
### AQUILA BBS

708-820-8344  
New User Information



### AQUILA BBS

1992  
Conference  
Directory



Call Today! - Modem - (708) 820-8344 - Voice - (708) 820-0480



a formal paper format, note that the recipient does form an image of who you are from what they receive. Very few of the rules of correspondence really change because it is electronic - nor the consequences.

Finally, there is also an implied sense of intimacy in e-mail that can be dangerous for beginners. It is YOUR terminal you are poring your heart out to, right? It's "private" mail, right? Actually not. Picture each character going up on the scoreboard at a Bulls game as you type it. There is an urge to confess all your inner feelings and frustrations by e-mail. Ultimately, you may NOT want this information known forever by the real HUMAN TYPE PERSON reading at the other end.

Jack Rickard

Jack,

I just wanted to say how much I enjoy reading your magazine. I find myself picking it up again and again to read it! However, I was alittle dismayed over the constant badgering concerning Amiga coverage in your magazine. Let's face it: the Amiga is DEAD in the United States so why do we need more coverage in your magazine? I certainly don't want to see it. The Apple // is also dead. Shall we start talking about the select few who still run a bbs using them? I think not! Maybe you could create a column something along the lines of "what ever happened to" and I'm sure the Amiga will be the first in line.

Keep up the good work,  
Stephen Krause  
S.Krause@aol.com

Stephen:

Boardwatch is about online communications more than it is about computers. We do cover software, and since over 90% of our readership uses IBM compatible clones, we tend to be a little askew toward that platform. But rest assured that if anyone ever does anything interesting or significant online with an Amiga, we'll be there trying to do the story as best we can. <got em again>.

Actually we HAVE done some stories on the Apple II, probably more so

than the Amiga. We did a story on a whole network of Apple II's with Internet connections using a particular software program, I think the author was Morgan Davis, and we've covered FrEdMail several times. The complaints from the Amiga crew reflect a desire for some fair time for a platform. We're not terribly interested in fair. We're interested in interesting. I would do a cover story on a KIM1 kit computer or Sinclair ZX-81 if it had something new or interesting for those who call in the night.

We've found an analogy to Boardwatch we think is pretty good, in all places, a Star Trek Next Generation episode. There is this ship of utter morons stranded dead in space that the Enterprise Encounters. Ryker, offering assistance, asks the captain of the ship what they are doing stranded out in the middle of nowhere. The other ship's captain replies "We look for things." Ryker asks, "What kind of things?" The captain replies, "Things to make us go." Ryker asks, "But where are you going?" And the captain replies, "To look for things." And the circular conversation continues without end. What Ryker couldn't understand was that these morons really did look for things, to make them go, to look for things, to make them go.

And we've rather adopted the whole thing as a mission statement here at Boardwatch. We look for things....

There are many things some of our readers want us to be, but that is about the sum total of what we actually are.

Jack Rickard

Hey Jack:

I read your articles about the FBI seizing bulletin boards in your April '93 issue. I think that the Steve Jackson Games case was the absolute strangest. How could a bbs be seized just because it had the same software and a same user from a "bad" BBS? Also, about the Offworld bust. I am from St. Louis, and there was a lot about Offworld in the news. One station even had an "investigative report" about how easy it was for children to access pornography over

the modem.

They made it look like every kid was out there downloading computer porno right and left! Somebody who didn't know much about BBSing would think that the world of bulletin boards was some evil, underground porno network. Well, as many of us have seen, the BBS scene is in fact a VERY good one.

Ian Scott  
St. Louis, MO  
startrekker@delphi.com

Indeed it is Ian. The main reason all of this happens is ignorance. In the case of Steve Jackson games, in retrospect I think everyone, including the Secret Service and FBI, recognize that it might have been possible to get a lot smarter on the BBS topic before making the seizure. The general media is struggling to get a handle on this "BBS thing" and I see evidence of some genuine effort. But it is a new thing for them. I think all of this is part of the process of developing a wider awareness in our society that this is not a CB Radio fad - but a real utility for living and working. It encompasses enough different things, and is still techie enough that getting a handle on it on a universal basis is going to be a process that has some anomalies. The alternative is for it to remain a closed system for a few thousand technoids. But it gains in value to us all with each additional online user.

The answer I believe is for everyone online to take a vested interest in educating the rest of the society on what it is and how it works. Unfortunately, there are rewards for those who simply "sound the alarm" on whatever hot issue is handy. Sex online and teenage-mutant hackers are an easy story and an easy score. This worked pretty well for the virus scaremongers who did an excellent job of it - on essentially a non-issue. Online, there actually is a rich enough environment to include at least one example of almost anything. We take two calls daily at Boardwatch from general press people who want to do the "Sex Online" story because it is an easy story and a sure sell. We could certainly make some temporary hay in the self aggrandizement department by

playing to this, but ultimately, it couldn't lead to any good end for them, for us, or for those online. If they sound sincere, we try to steer them toward something interesting and related, and if they are literally just looking for an example to fill a story they've already written, we send em on down the road. We actually got a call from ABC this week where they had a whole story nearly enough done about SkinHead Aryan Nation Bulletin Boards, that encourage violence. They were just calling us because they needed to find an example of one actually existing - you know, to give the story that extra edge of credibility. But ultimately it is just a sign of growth and expansion, and we'll all have to take the bad with the good.

Jack Rickard

Dear Khun Bill,

I was very happy when I found the Boardwatch magazine at the local supermarket but was totally overwhelmed when I saw your article in it. I am a Mac Sysop here in Bangkok and have having a bitch of a time getting info and news on what is going on. I am running Hermes BBS with only 1 node at the moment and have about 20 regular users for now.

It has been a problem in the past to get phone lines and you had to buy them for 1,000 - 2,000 \$ US per line and they were hard to find. Now we are about to receive 3 million new lines and I am ready to bring the E Mail services of the world to the Thai users doorstep with 100 lines. Now all I need is the BBS system.

Having looked at most of the big contenders RR, SS, TF, First Class, WWIV, Nova Link and Hermes I have resigned to Hermes for now. For 90 lines I think that the Hard Ware will price the Mac out of the Ball Park (local HW prices are 175% of the US list price & no Importing) and I will have to concede to use PC. The Mac user base is not large enough to support a Mac only BBS and if I want the PC world I need to have Qwk and the connections to UUCP.

Do you have any hot info or tips that

I should take into account before I jump into the fire?

Great to finally find a BBS mag that recognises the Mac. Keep up the great work.

Sawadee Krup,

Jamie Zellerbach  
jamiezel@nwg.nectec.or.th  
Bangkok, Thailand.  
BBS/Fax (662) 286 2196

Bill Gram-Reefer REPLIES:  
Jamie:

Especially if you don't have a large Mac audience and if there's that much of a cost difference I'd go with a PC setup. The idea is to offer low-cost communications not beef up Apple's 10Q. Build slowly and only as needed.

Hi,

I'm e-writing you on behalf of my company, DeltaLink Ltda., a newly formed city-wide network and information service. We are currently beginning to operate in Belo Horizonte, Brazil, and are aware of essentially similar start-ups going on in several other major Brazilian cities. I found your address in 'Boardwatch magazine'.

Our general intent is to be 'America Online'-like, with emphasis (at least for the first months) on Macintosh users. Right now we're running tests with Spider Island's TeleFinder software. However we plan to offer similar GUI capabilities to MS-DOS and Windows users.

We're having some difficulty in visualizing a growth path for our service. We'd like to avoid the 'BBS' label from the outset (sorry about that) to differentiate us from the current crop of Brazilian BBSes, which cater exclusively to personal users and are either free or charge around \$15/year. Our aim is to have a group of services oriented to small and medium businesses; mostly access to databases, on-line reservations and such. These business users would allow us to charge low rates for our personal users. Preliminary rates are around \$40 for sign-up (including the client software) and \$4/month for personal users.

The question is, how to migrate from a server package like TeleFinder (and it's a great package, no doubt) to being able to offer database and specialized online services to users running non-Mac platforms, and control all that in a more businesslike way. We have contacted people like HoloNet, Intercon, CIX and others. Their license prices for their software (including source code so we can alter, translate and extend the software) vary between \$50,000 and \$250,000 (!) plus monthly royalties in some cases. We might be able to afford that after a few year's growth, but right now it's impossible.

Are there no middle-level information services in the USA? All I know about are either BBSes (even overgrown BSSes) or huge networks like CompuServe and America Online.

Do you happen to know about any server software for high-end BBSes that:

- \* runs on a Macintosh (or Mac network) even if under A/UX, or a standard Unix box;
- \* has Mac, Windows and MS-DOS client software;

- \* is expandable with plug-in modules on both client and server side; \* costs under \$10,000?

Some people I contacted in England suggested that I look at CocomNet; so far I've no data on that one.

I've contacted many people over the Internet in search of suggestions, and I'd like to contact Mac-based services or BBSes which might share their experiences in growing on the Mac. Perhaps you could send me some addresses?

One puzzling experience I've had on the network is that most individual users direct a great deal of hostility towards the great services, like CompuServe, AOL or The Well. Is that because of high rates only, or is there some other beef? I've posted messages on several lists asking for suggestions to do it right from the outset, but nobody could or would tell me... Jack Rickard from Boardwatch Magazine wrote to tell me that I'm very confused about what a BBS is and how it differs from an Online Service; he also said



# DALLAS REMOTE IMAGING GROUP

BBS On-Line  
Satellite Directory

The DRIG BBS is the premier source of information on Satellite Tracking, Satellite Imagery, Telemetry Analysis, Tracking Programs, Satellite Databases, NASA, Space Communications AND MORE!

Over 6 GIGABYTES of files related to Satellites, Remote Sensing, Amateur Radio, Digital Image/Signal Processing, Amateur Television, AMSAT, NASA, and MORE!

- Online VISA/MC/AMEX Registration
- FIDONET and Internet Echomail areas
- Thousands of Satellite Images
- Daily Downloads (REALTIME) from Weather Satellites
- Satellite Keplerian/Tracking elements from NASA
- Offline QWK Mail Readers
- Boardwatch Online and USA Today DOORS
- Multiple Doors for Satellite Databases

10 Lines with USR Dual Standard 16.8K Modems

1 Year Membership - Full Downloading - No Ratios \$35.00

1 Year Membership - Full Downloading - Internet \$45.00

2 Year Membership - Full Downloading - Internet \$75.00

USE VISA/MASTERCARD/AMEX or Send Check for Subscription



ON-LINE SINCE

1985

## DALLAS REMOTE IMAGING GROUP

P.O. Box 117088  
Carrollton Texas  
75011 - 7088

(214) 394 - 7438

(214) 492 - 7747 Fax

Internet - kfsiw.lonestar.org/drigitw  
Fidonet - 1:124/6509

# BBShare!!

## 8 GIG+ OF THE LATEST PUBLIC DOMAIN, FREWARE AND SHAREWARE FILES!

WINDOWS	GIF
GAMES	OS/2
CAD	DTP
EDITORS	ART
FONTS	SOUND
UTILITIES	DOORS

ADULT FILE AREA  
CONFERENCES  
...AND MANY MORE

Free- five day  
trial period

## LARGEST BBS IN THE SOUTHEAST

- Subscribe on-line with MC or VISA 24 hours a day
- Multiple lines
- One hour unlimited download per day
- Full access to all message areas
- Special interest groups
- Bound Manual

**CALL NOW!**

**813-758-3223**  
2303-B Industrial Blvd  
Sarasota FL 34234

## Westside **ADULT BBS** Definitely Not Kid Stuff!

Hollywood's largest and most active BBS is also a local call from over 800 cities! Online since April 87, We've grown to 110 lines and serve 6000+ members with friendly sysops, gifs, steamy adult areas, shareware and much more! COME JOIN THE FUN!

Featuring



QUALITY TKO SCANS



ONLINE GAMES



PUBLIC FORUMS



CB & PRIVATE CHAT

**Free Trial!** 213 / 933 - 4050  
2400 8N1

or call Voice...  
1-800-HOTT-BBS

For free brochure and sign up info.

Visa, Mastercard and American Express Accepted

Westside



# A million people every day use WILDCAT! BBS.

## Isn't it time to find out why?

WE DELIVER!



Redefining Telecommunications in '93

### We didn't become Number 1 by accident.

Some of our competitors take five, six, even fifteen versions to get it right. And still fall short of the mark in features, performance, and value.

At Mustang Software, Inc., we don't expect our customers to live on promises. We deliver. Real features. Not just copycat add-ons and bundled 3rd party solutions.

Features like internal Zmodem and Kermit. Industry standard QWK-compatible offline messaging and echomail utilities. Fast query-by-example message and file searching, and one-touch file tagging. Real LAN and Digiboard support.

And RIPscrip graphics. Full mouse support for the remote user, from every menu prompt including text and dynamic menus. In a product that's shipping NOW, not next week or next year.

### Customer Support

There's more to a software package than just a few disks and a book or two. That extra something is customer support.

Friendly, helpful voice technical support is just a phone call away. We don't ask you to punch in your credit card number whenever you need help, or put you through to an engineer who treats you like an interruption. Our tech support staff understand what you're going through, because they're sysops themselves. They all run BBSs of their own. All 10 of them.

We give you 24 hour BBS support too. No "extended support" fees or subscriptions to pay, ever. For customers in most parts of the USA, a local call connects you with MSI SupportNET, Mustang's national customer support echo, hosted by MSI technical staff.

### Availability

WILDCAT! BBS was the first commercial BBS program to be offered by normal wholesale and retail distributors, and GSA suppliers, at competitive pricing.

Why pay full list price direct from the vendor, or from a limited number of "authorized dealers"?

*"Imagine having a business with over 2.5 million customers. That's what we had to face at the Connecticut Tax Department when a new personal income tax was enacted. How best to get information out? We thought a BBS would be a good idea. After checking several, we found WILDCAT! to be — dare I say it — the least taxing. Thanks, MSI, for an elegant program thoughtfully supported!"*

A.J. Janschewitz  
Connecticut Department  
of Revenue Services

You can be on the air for as little as \$99 "street price". Chances are, your favorite local software store or mail order outlet has WILDCAT! BBS ready for you to take home.

It's so easy to be a WILDCAT! BBS reseller, too. Why not make WILDCAT! part of your everyday product line? Call us for reseller information.

### Look at the numbers

**22,000 BBS operators**, and over **a million callers a day**, have all chosen the speed, power and flexibility of WILDCAT! BBS.

That makes WILDCAT! BBS the **Number One BBS software package on the market today**. And **that's no accident**.

Compare features. Compare support. Compare quality. Compare availability. **Compare value.** And you'll see why WILDCAT! BBS should be your first choice in BBS software.

### What are you waiting for?

Got a question? Call us toll free at

## 800-999-9619

Mustang Software, Inc.  
P.O. Box 2264 Bakersfield, CA 93303  
(805) 395-0223 Fax (805) 395-0713 BBS (805) 395-0650



that his aim is to teach services to be more 'BBS-like'. Do you have any comments on what BBSes do that online services don't?

A final comment is that the Net also has very conflicting opinions on the best platform to do what I want to do. One portion says that my hardware is completely overblown and that I should just pile on a dozen of PC-XTs running TBBS or MajorBBS. The other portion says that I obviously need a dozen Ethernetnetted SparcStations, or a Tandem minicomputer. Is there no nice middle level to that? I'd like to stay with the Mac, both for religious reasons :-), and to preserve all my years of learning Mac programming and supporting.

OK, sorry to have gone on at that length. Any comments you might have, or people you might point us to, will be greatly appreciated. Also feel free to pass this mail on to possibly interested people.

Thanks a lot for your help.

Rainer Brockerhoff  
rainer@dcc.ufmg.br  
Delta Consultoria,  
Nova Lima, BRAZIL  
DeltaLink Ltda.,  
Belo Horizonte, BRAZIL  
Intl. FAX: 55-31-3732801

#### BGR REPLIES:

Rainer:

Check out Lotus Notes! (Covered in December 92?) The real problem is that the Mac developers can create the modules you want but have to weight that kind of heavy-duty development activity against actual demand. As for Rickard's emphasis on a BBS look over an Online Service look, I don't want to put word's in the Editor's mouth—he's got plenty of his own—but I think what he's getting at is correct, a BBS feel, with its focus and service can run rings around a Brontosaurus, everything to everybody online.

## TELEBITS

### COMPUERVE ADDS DINOSAUR AREA

CompuServe Information Service has added a dinosaur forum (GO DINO) to try to cash in on the success of the movie Jurassic Park. The Dinosaur Forum is operated by the Dinosaur Society and will offer updates on scientific reports, museum events and schedules, current information about dinosaurs, and dinosaur graphic images. Matt Smith, who created the Snake River dig site for Jurassic Park, will join a few online conferences in the forum. On June 23, CompuServe will launch the Great Dinosaur Trivia Contest and Giveaway, a ten-week online contest providing three multiple choice questions each week. Correct answers qualify entries in a weekly drawing for some 300 prizes, as well as a grand prize drawing for five days and four nights for two at a dinosaur dig in Grand Junction, Colorado.

Established in 1979, CompuServe now claims worldwide membership of some 1.3 million members. The service requires an \$8.95 monthly charge plus \$8 per hour for 2400 bps access and \$16 per hour for 9600 bps connections.

### GALACTICOMM ESTABLISHES SHOWCASE FOR SUPPORT PRODUCTS

Galacticomm Inc. announced in June the Galacticomm Remote Interactive Development BBS, known as The GRID. This is a new online service devised as a testing ground and showcase for third-party products for The Major BBS.

The system uses The Major BBS version 6.1 and is open to the public at (305)321-2410 with no access charges, and will feature a constantly changing mixture of third-party add on products, utilities, mail packages, graphics, databases, games, and more. Each developer will have a forum for callers to make comments about their products.

The GRID runs on eight lines with high-speed modems in a GalactiBox (the company's multi-modem expansion chassis). The staff at Galacticomm logs on to the system through their Novel LAN. Says Scott Brinker, President and CEO of the company, "Our marketing, sales, and support departments log on regularly to stay up-to-date with the latest third party releases. When a customer asks, "Is there a product that does such and such, we love to answer "Yes!" - and then let them call in and see it in action."

Galacticomm has one of the strongest third-party followings in the BBS industry, with almost a hundred registered developers for their Version 6 platform. The availability of the C source code and a well-documented open application programming interface (API) has resulted in a wealth of freeware and commercial extensions for The Major BBS. These add-on products can be distributed as DLLs that smoothly plug into the BBS with A:INSTALL.

Says Ken Nash, Third-Party Developer Liaison at Galacticomm, and sysop of The GRID, "What better way to network developers and customers than through a BBS? It's a great way to put up-and-coming software through its paces, and get instant feedback to the respective developers from the folks who are going to use it." Nash also manages the Seal of Approval program, through which Galacticomm endorses quality third-party products.

"Everyone at Galacticomm feels a strong affinity toward our TPDs," says Brinker, who started his career as the first third-party developer for The Major BBS in 1986. "They embody the raw, midnight-oil entrepreneurial spirit that has always driven this technology. We're proud to support their work."

For more information about The GRID or Galacticomm's Developer Program, you can reach Nash and Brinker via Internet at knash@gcomm.com and brinker@gcomm.com respectively, or by voice phone at (305)583-5990.

## USA TODAY INFORMATION CENTER INTRODUCES FLAT RATE SERVICE

The USA TODAY Information Center is announcing a new flat monthly fee of **\$9.95** for its online service via computer and modem.

"Our members wanted the comfortability of unlimited access without watching the clock," says Phil Fuhrer, president of the USA TODAY Information Center. "Now, they can stay connected to USA TODAY nights and weekends and pay only **\$9.95** a month."

The flat fee service provides members with access to worldwide news and sports. Customers can follow developing stories generally, or research particular areas of interest. Member scan use keywords on weekends to uncover items of importance they may have missed during the week.

They can review the stock market, check the latest movie or record reviews, or track the ball scores and standings of their favorite teams - college or pro. The Information Center has in-depth and updated player and team statistics.

The USA TODAY Information Center also provides an Entertainment section for board and card game enthusiasts, plus e-mail, for **\$2.95** per hour nights and weekends.

Online game-playing with opponents worldwide: chess, backgammon, checkers, go, reversi, poker, blackjack and bridge.

The signup fee and software (IBM compatible) are included in the first month's fee of **\$9.95**.

For a free preview of the USA TODAY Information Center, call 1-919-855-3491 extension 224.

USA TODAY, the only national general-interest daily newspaper in the USA, was launched on September 15, 1982 by Gannett Co., Inc. It is distributed to all 50 states and in more than 90 countries and reaches 6 million readers daily.

## NIUQ SOFTWARE INTRODUCES POWERBOARD

NiUQ Software, Inc., a New York based firm specializing in DOS communications software has announced release of Powerboard BBS version 1.25.

The Powerboard BBS package includes a virus upload scanner, archive viewer, QWK mail door, ANSI/ASCII screen drawing program, newsletter creator, file and message area maintenance utilities, network mail tossers, a scripting language, and more.

Powerboard supports DESQview, CD-ROMS, and local area networks. Multilevel configuration consists of over 275 display screens, mouse driven configuration, dynamic menu editor, and a display string editor. The package is priced at \$99 for single node, \$175 for 3 node, and \$350 for 9 node version. NiUQ Software, 415-A Richbell Road, Larchmont, New York, 10538; (914)833-3479 voice; (914)833-3623.

## DATABASE DOOR WORKS WITH ANY BBS

Integrated Solutions, Inc. has introduced the first version of a product they call ModemBase Pro, a new database design and display program intended for use with computer bulletin board systems.

ModemBase Pro allows BBS operators to create their own custom-designed databases and put them online on their BBS as a DOOR. The database files are compatible with the dBASE III+ .DBF file format, and callers can access the database via the BBS.

ModemBase Pro works with a number of widely used BBS software packages including Wildcat!, Searchlight, PCBoard, GAP, and many others. The product consists of three modules, MBCOMPOSER, a setup program, MBMANAGE, an editor and design program, and MBACCESS, the gateway or DOOR allowing remote callers to move from the main BBS to the ModemBase Pro databases.

Databases can contain two billion records, with 128 fields per record, and supports attached memos of up to 65,535 bytes. Both sysop and caller can view, search, or edit the database, and caller access is determined by caller security level. ModemBase Pro is available at \$99 from Integrated Solutions, 2995 Van Buren Blvd., A-13-189, Riverside, CA 92503; (714)780-8860 voice; (714)780-9570 fax.

## ONE BBSCON SESSIONS ANNOUNCED

### ONE BBSCON



**COLORADO SPRINGS**  
**AUGUST 25-29 1993**

The preliminary draft of the session plan for the Online Networking Exposition and BBS Convention (ONE BBSCON), scheduled for August 25-29, 1993 at the Broadmoor Hotel in Colorado Springs, Colorado, was released June 24th.

Over 2000 BBS operators are expected to gather for the four day convention. Primarily an educational "show and tell" event, ONE BBSCON will feature some 140 educational sessions over the course of the gathering in addition to a vendor exhibit area of over 130 displays. During some time slots, as many as eleven sessions will be going simultaneously. This is virtually equivalent to the full session schedule for many conventions occurring every HOUR at ONE BBSCON.

Several themes seem to emerge at this year's ONE BBSCON. Dealing with Adult images in the BBS community, and the current spate of raids by the Federal Bureau of Investigation has caused concern among many electronic bulletin board operators. Mike Godwin, counsel for the Electronic Frontier Foundation who handles many calls from BBS operators, will lead a panel



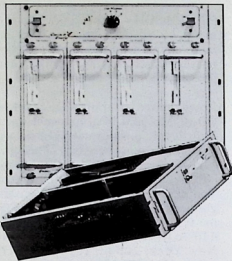
session titled BBSs Under Attack - The First Amendment. Greg Ryan, of EXEC-PC will lead a panel on Dealing With Adult Images on BBS which includes Event Horizon's BBS operator Jim Maxey, Larry Wood - moderator of CompuServe's Graphics Forum, CD-ROM publisher Lee Noga, Shari Steele of the Electronic Frontier Foundation, and Attorney Herb Kraft. Rusty and Edie Hardenberg, operators of Rusty & Edie's BBS which was raided by the FBI in January of this year, will host their own panel discussion, including their legal team, to describe what happened, and what they have learned about our legal system and electronic bulletin boards. A privacy and censorship session led by David Johnson includes Lance Rose, Dan Linton - operator of Software Creations BBS, Larry Wood, and Michael Greenbaum of Prodigy.

The second theme strongly demonstrated in this session plan revolves around the Internet. Dr. Vinton Cerf, President of the Internet Society, will deliver an address on the Past, Present, and Future Internet. Ann Branscomb of Harvard's Center for Information Policy Research will present an overview of The Government, The Internet, and the BBS. Bernard Aboba, author of the BMUG Guide to Bulletin Boards and Beyond will introduce some basic concepts in Internet 101. Tim Pozar and Mark Graham will expand on these definitions in Internet 102. Britt Bassett will do a presentation on TCP/IP and Doug Kerry will cover SLIP and PPP. There will be sessions on connecting your BBS to UUCP and Usenet, as well as sessions on How to Connect Your BBS to the Internet itself using the Internet Protocol. The series will be followed by a breakout based on your particular BBS software with vendors demonstrating how to actually connect a PCboard system to the Internet, a TBBS system, a Wildcat system, etc using specific software packages.

Additionally, several vendors offering UUCP host accounts will be on hand. Arthur Britto of Holonet notes that they have been connecting huge numbers of bulletin boards nationwide. Norman Gillespie of PageSat will give a presentation on Satellite Communications for Bulletin Boards.

## INTRODUCING THE CUBE.

*The Flexible,  
Affordable  
Rack System.*



With "Cube," from CEC, you can organize and expand your BBS or Networks' communication system easily, economically and efficiently.

Each "Cube" is a 15" x 15" x 15" case that holds up to 4 processors — each one a complete computer —286, 386, or now a 486! And every processor comes standard with a 1.44 Mb drive, IDE/Floppy controller, and your choice of a MGA or VGA monitor card. Whats more, each processor can handle up to 3-16 bit cards and 2-8 bit cards, plus, you can mount a 3 1/2" hard drive internally.

With the Cube, you can Hot Swap units quickly and easily, and, you can stack them up to 5 Cubes high...housing up to 20 processors neatly and efficiently.

To find out more about the Cube rack system including CyFax and Remote Access servers, call us today. We can also help you to custom design a rack system for special requirements.



COMPUTERS EFFICIENTLY, INC.  
208 East 51st Street  
New York, N.Y. 10022

800-477-0791 BBS: 212-885-3101

PageSat was featured in our June issue and claims over a hundred BBS installations since as a result of our article on their \$1800 satellite system to provide a full Usenet News Feed by radio with no online connect charges. They will demonstrate an actual system, but lost in the satellite hoopla is the fact that they do provide standard telephone accounts as well. And Guy Cook, newly appointed Chief Executive Officer of Colorado SuperNet, will describe their UUCP/SLIP/PPP/IP account offerings for bulletin boards.

One of the biggest areas of interest is in forming a National BBS Operator's Association to provide representation in Washington, industry statistics, and the other things that associations normally do. There isn't a second industry in the world with 50,000 participants lacking one. Mike Godwin and Lance Rose will referee 15 rounds on this in the a bout scheduled for 90 minutes titled Forming a National BBS Association - Are We Ready. In the event of survivors, ONE, Inc. will sponsor meeting rooms for any working committees each evening, and a second 90 minute wrapup open session has

## the SILICON Dreamland

**Why pay outrageous  
long distance rates ?...**

**Call us TOLL FREE on all 5 nodes**

- Node 1: 16.8k USR HST DUAL
- Node 2: 16.8k USR Courier
- Node 3: 14.4k USR HST DUAL
- Node 4: 14.4k USR HST DUAL
- Node 5: 16.8k USR HST DUAL

- Over 40,000 files
- 6 CD Rom Drives Online
- Running Synchronet BBS v1 .oob
- Online Shopping (Complete Hardware Inventory)
- Internet Netmail and over 400 EChomail conferences
- tok@silicon.com
- Real Time Chat
- Files Updated Daily

**Call Today and Put Yourself  
in DREAMLAND!**

800-DRM-LND1  
800-376-5631 (outside IL)  
708-433-6782 (inside IL)  
VOICE 708-433-6029 Support Line

# Online Networking Exposition and BBS Convention ONE BBSCON

**Broadmoor Hotel  
Colorado Springs, Colorado**

# ONE BBSCON

**COLORADO SPRINGS  
AUGUST 25-29 1993**

## INTRODUCTORY SESSIONS

Welcome to ONE BBSCON .....	Phil Becker/Jack Rickard .....	9:00 .....	08/26/93
Boardwatch Readers Choice Awards .....	Jack Rickard .....	13:00 .....	08/26/93
Dvorak Awards for Excellence in Telecommunications .....	John C. Dvorak .....	17:30 .....	08/26/93

## HOW TO MAKE MONEY WITH A BBS TRACK

BBSing for Profit I .....	Jack Rickard/Phil Becker .....	14:30 .....	08/26/93
BBSing for Profit II .....	Jack Rickard/Phil Becker .....	16:30 .....	08/26/93
Media Relations for Online Services .....	David Coursey/Dennis Fowler/Cheryl Gerber/David Carlson .....	16:30 .....	08/26/93
Stand Out in Cyberspace - Making a Good BBS .....	Dennis Fowler .....	9:15 .....	08/27/93
Creating a Business Plan for BBBS .....	Simon Clement .....	10:45 .....	08/27/93
Credit Card Merchant Accounts for Online Services .....	Dave Jones .....	13:30 .....	08/27/93
Subscription BBS Success Roundtable .....	Kevin Behrens/Dan Linton/Andy Keeves/Greg Ryan/Norm Henke .....	15:00 .....	08/27/93
Success Measurement for BBBS .....	Simon Clement .....	17:00 .....	08/27/93
Direct Mail Marketing Techniques for BBBS .....	Dennis A. Hauser .....	9:15 .....	08/28/93
Building Online Community .....	John Coate/Cliff Figallo .....	10:45 .....	08/28/93
BBS Business Plans - The Venture Capitalist's View .....	Dave Kennedy .....	13:30 .....	08/28/93
Chat/Social BBS Success Roundtable .....	Dean Kert/Scott Brinker/Michael Allen/Bruce Lomasky/R Michnick .....	15:00 .....	08/28/93
CyberFinance: How to Raise Capital for BBBS .....	Pat Clawson .....	17:00 .....	08/28/93
Guerrilla Marketing Your BBS .....	Shari Robert/David Carlson .....	17:00 .....	08/28/93
The BBS as a Service Bureau .....	Jim Appleby .....	9:00 .....	08/29/93
900 Service for BBBS .....	Yannick Tessier .....	10:30 .....	08/29/93

## THE LEGAL/SOCIAL ISSUES TRACK

Electronic Democracy: An Overview .....	Tim Stryker .....	13:00 .....	08/26/93
Women Online .....	Brenda Donovan .....	14:30 .....	08/26/93
Public Electronic Access to Government Information .....	Jim C. Warren .....	14:30 .....	08/26/93
Forming a National BBS Association: Are We Ready .....	Mike Godwin/Lance Rose .....	14:30 .....	08/26/93
Privacy and Security on Internet .....	Rob Kolstad .....	14:30 .....	08/26/93
Meet the Electronic Frontier Foundation .....	Shari Steele .....	16:30 .....	08/26/93
FBI Raid on Rusty & Ed's BBS .....	Rusty Hardenberg .....	16:30 .....	08/26/93
Privacy and Censorship .....	David Johnson/Lance Rose/Dan Linton/Andy Keeves/Michael Greenbaum .....	14:30 .....	08/27/93
SuperDemocracy Online - Opportunities Today .....	Tim Stryker .....	9:15 .....	08/27/93
Dealing with Adult GIF Images on BBS .....	Greg Ryan/Jim Maxey/Shari Steele/Larry Wood/Herb Kraft .....	10:45 .....	08/27/93
BBBS Under Attack - The First Amendment .....	Mike Godwin .....	17:00 .....	08/27/93
Legal Question/Answer Session .....	Lance Rose/Mike Godwin/Herb Kraft/David Johnson/Anne Branscomb .....	10:45 .....	08/28/93
Building Online Community .....	John Coate/Cliff Figallo .....	10:45 .....	08/28/93
National BBS Association Wrapup .....	Mike Godwin/Lance Rose .....	10:30 .....	08/29/93

## THE CORPORATE/BUSINESS APPLICATIONS TRACK

Commercial Services Roundtable .....	Michael Greenbaum/Steve Laliberte .....	14:30 .....	08/26/93
Graphics Interface Design for Business Applications .....	Jim Appleby .....	9:15 .....	08/27/93
The Major BBS as an Online Office .....	Shari Steele .....	10:45 .....	08/27/93
Online Databases Technology Roundtable .....	Jim Appleby/Dan Linton/Troy Getty/Alan Bryant .....	10:45 .....	08/27/93
TDBS - xBASE Applications Online for TDBS .....	Philip L. Becker .....	10:45 .....	08/28/93
Integrating FAX with The Major BBS .....	Brian Stephens/Chris Robert .....	9:00 .....	08/29/93
The BBS as a Service Bureau .....	Jim Appleby .....	9:00 .....	08/29/93
ModemBase Pro - Database DOOR Application /BBBS .....	Troy Getty .....	10:30 .....	08/29/93

## THE GOVERNMENT/EDUCATION TRACK

Electronic Democracy: An Overview .....	Tim Stryker .....	13:00 .....	08/26/93
Telecommunications Policy for Education .....	Dr. H. George/Eugene Loti/Dave Hughes/Ed Lyell/Nancy Bolt .....	9:30 .....	08/26/93
Public Electronic Access to Government Information .....	Jim C. Warren .....	14:30 .....	08/26/93
SuperDemocracy Online - Opportunities Today .....	Tim Stryker .....	9:15 .....	08/27/93
Educational Telecommunications - FidoNet - Internet .....	M. Sternheim/Angus Dunn/Cleason Sackman/Dave Hughes/H. Sternheim .....	10:45 .....	08/27/93
The Past, Present, and Future Internet .....	Dr. Vinton Cerf .....	13:30 .....	08/27/93
The Government, the Internet, and the BBS .....	Anne Branscomb .....	17:00 .....	08/27/93
The CyberSpace Classroom One Year Later .....	Dr. Walter Copley .....	9:15 .....	08/28/93
Bulletin Boards for Government Agencies .....	Bob Davis/Erik Dellinger/Key Royer/Karl Schneider/Bill Curdy .....	10:45 .....	08/28/93
Making Government User Friendly: Public Sector Goes Online .....	Bruce H. Kirschner .....	17:00 .....	08/28/93





### TECHNICAL TOPICS TRACK

CD-ROMS and BBSs .....	unassigned .....	13:00 .....	08/26/93
Network Publishing With Royalty: Xanadu Publishing .....	Ted Nelson .....	13:00 .....	08/26/93
Data Communication Trends .....	Phil James .....	16:30 .....	08/26/93
QWK Mail .....	Mark "Sparky" Herring .....	9:15 .....	08/27/93
Future of Modern Technology Roundtable I .....	unassigned .....	9:15 .....	08/27/93
Online Databases Technology Roundtable .....	Jim Appleby/Dan Hanson/Troy Getty/Alan Bryant .....	10:45 .....	08/27/93
Dealing With Viruses .....	John McAfee .....	13:30 .....	08/27/93
How It Began - The First BBS .....	Ward Christensen .....	13:30 .....	08/27/93
Satellite Communications for BBSs .....	Norman Gillespie .....	13:30 .....	08/27/93
Data Compression Theory and Techniques .....	Phil Katz .....	15:00 .....	08/27/93
Future of Modern Technology Roundtable II .....	unassigned .....	15:00 .....	08/27/93
Dealing with Serial Ports .....	Phil Becker .....	17:00 .....	08/27/93
DES/Share and Communications .....	Michael Chapman .....	17:00 .....	08/27/93
Introduction to UUCC Protocol .....	Chris Ambler .....	17:00 .....	08/27/93
Connecting Your BBS to an X.25 Packet Network .....	Dean Kerl .....	17:00 .....	08/27/93
Memory Management - GEMM for BBSs .....	Michael Chapman .....	9:15 .....	08/28/93
Macintosh Data Compression .....	Dave Schrage/Leonard Rosenhol .....	9:15 .....	08/28/93
An Overview of ISDN Deployment .....	Dennis C. Hayes .....	13:30 .....	08/28/93
The National ISDN Advantage for BBSs .....	Stephen J. Cunningham/Jack DeQuano .....	15:00 .....	08/28/93
Macintosh ISDN Applications .....	Guy Bonneau .....	17:00 .....	08/28/93
X.25 Packet Switch Networks for BBSs .....	Greg Eichman .....	17:00 .....	08/28/93

### GRAPHICS/INTERFACE TRACK

Graphics Interface Design for Business Applications .....	Jim Appleby .....	9:15 .....	08/27/93
Dealing with Adult GIF Images on BBS .....	Greg Ryan/Jim Maxey/Shari Steele/Larry Wood/Herb Kraft .....	10:45 .....	08/27/93
RIPscript - Remote Imaging Protocol Script Language .....	Jeff Reeder .....	10:45 .....	08/27/93
Graphic Interface Technology Roundtable .....	Jeff Reeder/Seth Hamilton/Bernal Schooley/Dave Hughes/Len Anderson .....	16:30 .....	08/27/93
Searchlight with RIPscript Graphics .....	Frank Larosa .....	17:00 .....	08/27/93
RIPscript Workshop for The Major BBS .....	Scott Brinker/Jeff Reeder/Chris Robert .....	9:15 .....	08/28/93
TBBS Graphics RIP/INAPLS, etc .....	Philip L. Becker .....	13:30 .....	08/28/93
RIPscript Developer's Forum .....	Jeff Reeder .....	9:00 .....	08/28/93

### THE INTERNET TRACK

Internet 101 .....	Bernard Aboba .....	13:00 .....	08/26/93
Privacy and Security on Internet .....	Rob Kolstad .....	14:30 .....	08/26/93
Internet 102 - the Odyssey Continues .....	Tim Pozar/Mark Graham .....	16:30 .....	08/26/93
Introduction to TCP/IP .....	Brett Bassel .....	9:15 .....	08/27/93
SLIP and PPP Protocols for Internet .....	Doug Kerry .....	10:45 .....	08/27/93
The Past, Present, and Future Internet .....	Dr. Vinton Cerf .....	13:30 .....	08/27/93
Satellite Communications for BBSs .....	Norman Gillespie .....	13:30 .....	08/27/93
Internet Commercialization .....	Lloyd Brodsky .....	15:00 .....	08/27/93
Introduction to UUCC Protocol .....	Chris Ambler .....	17:00 .....	08/27/93
Internet/UUCP Host Accounts .....	Norman Gillespie/Arthur Britto/Guy Cook .....	9:15 .....	08/28/93
Connection Your BBS to Internet Using IP .....	Brad Clements/Tim Pozar/Alex Hogmann/Mark Graham/Arthur Britto .....	10:45 .....	08/28/93
Connecting Your BBS to UUCP and USENET .....	Chris Ambler/Tim Pozar/Arthur Britto/Roy Pereira .....	13:30 .....	08/28/93
Connecting Wildcat to Internet .....	Tom Timpidis/Joseph Martin .....	15:00 .....	08/28/93
Connecting PCBoard to Internet - PCB-UUCP .....	Roy Pereira .....	15:00 .....	08/28/93
The Major BBS - Message Networks and MHS .....	Edward Bust/Tony Javoric/Skip Potter/Robert Michnick .....	15:00 .....	08/28/93
Connecting TBBS to Internet - PIMP .....	Jack Rickard .....	15:00 .....	08/28/93
Colorado SuperNet .....	Guy Cook .....	17:00 .....	08/28/93

### SURVEY OF BBS SOFTWARE TRACK

Wildcat! BBS Introduction .....	Jim Harter/Scott Hunter .....	9:15 .....	08/27/93
Introduction to TBBS .....	Phillip L. Becker .....	9:15 .....	08/27/93
Intro to 1stClass BBS .....	Mauri Markowitz .....	13:30 .....	08/27/93
Introduction to The Major BBS .....	Scott Brinker .....	13:30 .....	08/27/93
PCBoard Version 15.0 .....	David Terry .....	15:00 .....	08/27/93
Intro to hi-BBS .....	Guy Bonneau .....	17:00 .....	08/27/93
Introduction to Searchlight BBS .....	Frank Larosa .....	9:15 .....	08/28/93
Introduction to Robo-Board .....	Seth Hamilton .....	13:30 .....	08/28/93
Intro to Novalink Professional BBS .....	Len Anderson/Alex Hogmann .....	13:30 .....	08/28/93
Introduction to TEAMate .....	Bob Baskerville .....	13:30 .....	08/28/93
Remote Access BBS .....	Andrew Milner .....	13:30 .....	08/28/93
Intro to Telefinder BBS .....	Rusty Tucker/Chris Silverberg .....	15:00 .....	08/28/93
Introduction to Falken BBS .....	Jeffery Coons .....	15:00 .....	08/28/93
Introduction to Celerity BBS .....	Brendan Wolniay .....	17:00 .....	08/28/93
UNIX BBS Software Vendor Panel .....	Bob Baskerville/Theodore Tso .....	10:30 .....	08/29/93

### CALLER SOFTWARE - TERMINAL PROGRAMS AND OFFLINE READERS

Data Communication Trends .....	Phil James .....	16:30 .....	08/26/93
Offline Mail Readers: A look at OLX .....	Jim Harter/Greg Hewgill .....	13:30 .....	08/27/93
SmartCom for Windows .....	unassigned .....	9:15 .....	08/28/93
QModem for Windows .....	Jim Harter/Greg Hewgill .....	13:30 .....	08/28/93
Teir Communications .....	Jeff Woods .....	15:00 .....	08/28/93
QModemPro for DOS .....	Jim Harter/John Friel III .....	17:00 .....	08/28/93

## NETWORKS AND CONNECTIVITY TRACK

QWK Mail .....	Mark "Sparky" Herring .....	9:15 .....	08/27/93
Macintosh Networking Issues .....	Alan Helfich/Len Anderson/Maury Markowitz .....	10:45 .....	08/27/93
FidoNet Basics .....	Phil Becker .....	13:30 .....	08/27/93
Satellite Communications for BBBS .....	Norman Gillespie .....	13:30 .....	08/27/93
Gateways for Wildcat! - Internet/MHS/QWK .....	Jim Harrer/Vestlin Fryatt .....	15:00 .....	08/27/93
TBBS Connectivity - QWK/FidoNet, Interchange .....	Philip L. Becker .....	15:00 .....	08/27/93
Connecting Your BBS to an X.25 Packet Network .....	Dean Kerl .....	17:00 .....	08/27/93
Introduction to iLink .....	Jim Lee .....	9:15 .....	08/28/93
Wildmail Echomail Tossers for Wildcat! .....	Joseph Martin .....	10:45 .....	08/28/93
Front End Mailer Programs (D Bridge) .....	Martin P. Belcke .....	13:30 .....	08/28/93
An Overview of ISDN Deployment .....	Dennis C. Hayes .....	13:30 .....	08/28/93
The Major BBS - Message Networks and MHS .....	Edward Bush/Tony Javoric/Skip Potter/Robert Michnick .....	15:00 .....	08/28/93
The National ISDN Advantage for BBBS .....	Stephen J. Cunningham/Jack DeQuano .....	15:00 .....	08/28/93
SDN - Software Distribution Network .....	unassigned .....	15:00 .....	08/28/93
X.25 Packet Switch Networks for BBBS .....	Greg Eichman .....	17:00 .....	08/28/93
Introduction to MajorNet .....	Robert Michnick .....	10:30 .....	08/29/93

## WILDCAT! BBS TRACK

Wildcat! BBS Introduction .....	Jim Harrer/Scott Hunter .....	9:15 .....	08/27/93
Offline Mail Readers: A look at OLV .....	Jim Harrer/Greg Hewgill .....	13:30 .....	08/27/93
Gateways for Wildcat! - Internet/MHS/QWK .....	Jim Harrer/Vestlin Fryatt .....	15:00 .....	08/27/93
wePROL - The Ultimate Sysop Utility for Wildcat! .....	Jim Harrer/Sam Robertson .....	9:15 .....	08/28/93
QModem for Windows .....	Jim Harrer/Greg Hewgill .....	10:45 .....	08/28/93
Wildmail Echomail Tossers for Wildcat! .....	Joseph Martin .....	10:45 .....	08/28/93
Connecting Wildcat! to Internet .....	Jim Timpidis/Joseph Martin .....	15:00 .....	08/28/93
ModemBase Pro - Database DOOR Application for BBBS .....	Troy Getty .....	10:30 .....	08/29/93

## TBBS BBS TRACK

Introduction to TBBS .....	Philip L. Becker .....	9:15 .....	08/27/93
TBBS Menu Design .....	Philip L. Becker .....	10:45 .....	08/27/93
TBBS Connectivity - QWK/FidoNet, Interchange .....	Philip L. Becker .....	15:00 .....	08/27/93
TBBS - xBASE Applications Online for TBBS .....	Philip L. Becker .....	10:45 .....	08/28/93
TBBS Graphics RIP/NA/PLPS, etc .....	Philip L. Becker .....	13:30 .....	08/28/93
Connecting TBBS to Internet - PIMP .....	Jack Rickard .....	13:30 .....	08/28/93
TBBS Future Directions .....	Philip L. Becker .....	17:00 .....	08/28/93
TBBS Third Party Developers Meeting .....	Ben Cunningham .....	10:30 .....	08/29/93

## PCBOARD BBS TRACK

PCBoard Version 15.0 .....	David Terry .....	15:00 .....	08/27/93
PCBoard Programming Language .....	Louis Zirkel .....	10:45 .....	08/28/93
PCBoard/M Code Supplement .....	Daniel Chlarson .....	13:30 .....	08/28/93
Connecting PCBoard to Internet - PCB-UUCP .....	Roy Pereira .....	15:00 .....	08/28/93

## THE MAJOR BBS TRACK

The Major BBS as an Online Office .....	Sheri Robert .....	10:45 .....	08/27/93
Introduction to The Major BBS .....	Scott Brinker .....	13:30 .....	08/27/93
RIPscript Workshop for The Major BBS .....	Scott Brinker/Jeff Reeder/Chris Robert .....	9:15 .....	08/28/93
Online Door Programs with The Major BBS .....	Edward Bush/Tony Javoric/Skip Potter/Robert Michnick .....	13:30 .....	08/28/93
The Major BBS - Message Networks and MHS .....	Edward Bush/Tony Javoric/Skip Potter/Robert Michnick .....	15:00 .....	08/28/93
Integrating FAX with The Major BBS .....	Brian Stephens/Chris Robert .....	9:00 .....	08/29/93
Introduction to MajorNet .....	Robert Michnick .....	10:30 .....	08/29/93
Developing Products for The Major BBS .....	Chris Robert .....	10:30 .....	08/29/93

## MACINTOSH BBS TRACK

Macintosh BBS Administration .....	Michael Bean .....	9:15 .....	08/27/93
Macintosh Networking Issues .....	Alan Helfich/Len Anderson/Maury Markowitz .....	10:45 .....	08/27/93
Intro to 1stClass BBS .....	Maury Markowitz .....	13:30 .....	08/27/93
Macintosh File Distribution .....	Alan Helfich .....	15:00 .....	08/27/93
Intro to hi-BBS .....	Guy Bonneau .....	17:00 .....	08/27/93
Macintosh Data Compression .....	Dave Schrage/Leonard Rosenhol .....	9:15 .....	08/28/93
Mac Sysops Speak Out .....	Bill Gram-Reeser/Michael Bean/Alan Helfich .....	10:45 .....	08/28/93
Intro to Novalink Professional BBS .....	Len Anderson/Alex Hopmann .....	13:30 .....	08/28/93
Intro to Telefinder BBS .....	Rushy Tucker/Chris Silverberg .....	15:00 .....	08/28/93
Macintosh ISDN Applications .....	Guy Bonneau .....	17:00 .....	08/28/93

## MISCELLANEOUS SESSIONS

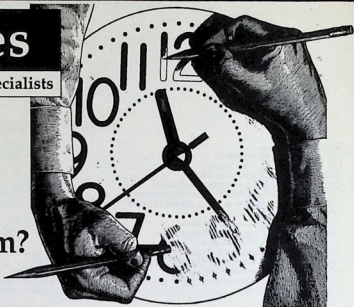
Association of Shareware Professionals .....	unassigned .....	13:00 .....	08/26/93
Cultivating Information Entrepreneurs .....	George Thorpe .....	9:15 .....	08/26/93
Media Relations for Product Vendors .....	David Coursey/Cheryl Gerber/David Carlson/Dennis Fowler .....	17:00 .....	08/27/93
IRS Electronic Filing Applications .....	Terry Donohoue .....	13:30 .....	08/28/93
SEX NO MORE/BBS Operator's One Significant Other .....	Irene K. Fletcher .....	17:00 .....	08/28/93
Falcom BBS Doors .....	William Bell/Ted Rode .....	9:00 .....	08/29/93
Inexpensive UNIX Implementations .....	Theodore Tso/Tim Pozar/Rob Kolstad .....	9:00 .....	08/29/93



# GW Associates

Communications and Information Systems Specialists

## Are You Losing Time Setting Up Your Business On-Line Information System?



**INSTALLING COMMERCIAL BBS SYSTEMS IS OUR ONLY BUSINESS**

### The Only Choice in Telecommunications

GW Associates was formed several years ago to promote and support the growing need for Information Management systems (BBS). Our goal has always been to make communications easier. We've always had the opinion that many seem to work very hard to make "telecommunications" some kind of mystery, a gray area where common man should never wander. And it really can be made simple. We'll be happy to show you how!

### Multi-User Environments

Our ONLY business is telecommunications. We install commercial information management systems, we install telecommunications networks linking offices across the country using personal computers and inexpensive automated software. And we sell everything from single line TBBS software to 64 line "plug and play" packages.

### Cost Effective

We remotely maintain commercial BBS systems. It's a good bet that you have never hired an employee to be a System Operator. And any time that an employee spends in the design and maintenance of a system is taking time away from the work that employee was hired to do! What happens when the employee is promoted, transfers or resigns? Can you afford to hire and train, or take another employee away from assigned tasks? We can support your TBBS system remotely at what might be a lower cost than what you will pay for an employee benefits package, and we won't demand paid vacations or coffee breaks.

### Attention All Programmers

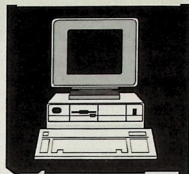
While our main business is the sales and support of TBBS/TDBS systems we find we have all the necessary software in place to market and support any software, regardless of the market it is targeted to. If you have an MS-DOS based software package you would like to market, please give us a call. We know we can help you increase your income, we've been doing it for our associated TBBS/TDBS programmers for years! If you have a "user supported" software package and feel it can do better commercially we would like the opportunity to help you be successful. For more information just call!

### Call Today For More Information

If there's anything we can do to help you make better use of any communications tool, please ask. If you're not sure if you really have a need for a system and want to know more, please ask. We're here to help in any way we can. We hope you'll give us the opportunity to help. If you need information on prices or just need information on communications, don't hesitate to ask for help. We enjoy what we do and we'll enjoy discussing your applications and needs.

## System Support / Custom Programming

There's a lot available for the TBBS/TDBS System Operator, as well as for anyone interested in an Information System (BBS). If you want to learn more about TBBS/TDBS just call our system and register as a customer. GW Associates offers full support to all System Operators and "we have more than twenty excellent programmers" available to help with your applications and customizing of your system at a very reasonable cost. Please call our system at (508) 429-8385 (N,8,1) and keep up with our new releases or call us on our voice line at (508) 429-6227 if we can help you in any way. Installing and remotely supporting commercial systems is our ONLY business!



**Call our Sales and Support BBS for full demonstrations of over 100 TBBS / TDBS add-on application, entertainment and utility programs.**

### TBBS / TDBS SYSTEM ENHANCEMENT SOFTWARE

#### QuickSearch

The ultimate in text file search programs, QuickSearch is the ideal tool for any customer or sales support system. QuickSearch is a program that is designed to create an index of over 11,000 text files in up to 99 directories and allow a user to perform a multiple boolean criteria search to find matches in these files and present them for display or download. It sounds simple, and it is! And it is unbelievably fast. This program is a must if you have a need for fast information retrieval. Easy to install and even easier to maintain, it can quickly put an end to repetitive questions from your users.

#### The Master Series

*BoardMaster* is the answer to the need for a fast, easy-to-use way to organize and display your message base without using TBBS menus. It allows ONE menu entry, or none at all. It displays up to 999 different message areas/topics with 60 boards displayed on each screen. BoardMaster is fully multi-lingual and color configurable by SysOp and individual users. It has full support for topic boards, Personal Message Groups defined by your users, and many other features to make it easier for your users to access message boards.

*PostMaster* will handle all your needs for sending mail to users. You create messages that appear very similar to TBBS messages and send to users by a wide range of criteria, including "send to list" capability, without impacting your TBBS message base. It even handles file enclosures. There is no limit to the number of messages that PostMaster will deliver and Individual logs are maintained for each message so you know when messages have been read. Other features include: automatic cutoff; automatic repeat; start delivery on specified date; complete support for ANSI and ASCII users.

#### Master File Manager (MFM)

MFM is designed to make it as easy as possible for your users to download files from fixed disks and compact discs with as little impact to the system as possible. And with the new network interface MFM adds even more capability and flexibility to this well known and full featured program. Hundreds of TBBS SysOps now use MFM to simply and easily handle all their file download requirements.

#### Entertainment Software

We have dozens of games and entertainment software available, including the all new The Wild Side (Interactive Adult Adventure), Video Poker, and Chain Links (an addictive word chain puzzle). If you are interested in arcade games, word games, games of chance or adventure games for your TBBS/TDBS system we have them at prices from \$29.95 to \$169.95.

#### Application and Utility Software

We are the recognized source for excellent TBBS/TDBS application and utility software with over 60 programs in our catalog and more being added every week!

**Voice Phone (508) 429-6227 Data Line (508) 429-8385 Fax Line (508) 429-3859**

**GW Associates P.O. Box 6606 Holliston, MA 01746**



**Authorized Dealer  
Sales / Service / Support**

© 1994 GW Associates TBBS/TDBS/TBBS are trademarks of eSoft, Incorporated



# Launch into Cyberspace with a local call.

**N**ow you can discover the outer limits of the Internet, as well as any other NovaLink service, with a local call. The Internet is the largest computer network ever formed. Every day millions of people, entrepreneurs, hobbyists, scientists and professionals, link up to access databases, communicate with peers, send electronic mail, and participate in bulletin boards. NovaLink is your gateway to this world.

...**MAXIMUM PAYLOAD:** On NovaLink, you have access to the full range of Internet possibilities. Besides being able to subscribe to mailing lists, send electronic mail and read UseNet news, you'll be able to use our UNIX Shell to connect to other computers on the Internet using *telnet*. You can download files from the thousands of Internet archives using *ftp*. We also support popular client programs like *gopher* and *irc* (internet relay chat). If you don't know what all that means, the NovaLink staff is on hand to help you get the most out of this fantastic resource.

NovaLink is connected to commercial networks on the Internet like ANS/CORE and the CIX (Commercial Internet Exchange), so you are free to use your account for business and entertainment pursuits as well as academic purposes.

...**MAXIMUM VELOCITY:** Connect as fast as you want to NovaLink's high speed system. If you've invested in a fast modem, there is no need to diddle around at 2400 baud. 9600 baud network connections are available from most major cities at no extra charge. Connect directly at speeds up to 14400.

...**UUCP FEEDS AVAILABLE:** NovaLink is now offering inexpensive flat-rates for news and mail feeds via our local access numbers. - perfect for getting your BBS or corporate mail network on the Internet. Call today for current information!

...**EXPERT GROUND CONTROL:** We maintain a staff of over thirty system operators and customer service people dedicated to making your online experience a pleasant one. Our service representatives are trained in every NovaLink product, and can assist you promptly and courteously whether you call our toll-free support number or contact us online.

**NovaLink is a full-range  
information service  
providing everything  
you'll need to have fun,  
get connected, and meet  
people online...**

...**ADULTS ONLY:** You must be over the age of eighteen to subscribe to NovaLink. This gives you the freedom to enjoy mature communications in a relaxed atmosphere without worrying about the presence of youngsters. You'll also find a selection of adult services including personal ads, an adult file collection, and the Virtual Cafe - a social roleplaying environment great for making friends and finding romance online.

...**AN ABUNDANCE OF FILES:** NovaLink maintains its own libraries containing thousands of files, each described in detail and reviewed by our sysops for download suitability. Take advantage of our easy-to-use expert query system to find just what you are looking for, whether it's a graphic image or a shareware spreadsheet.

Each download comes with our guarantee - if its description was wrong, or it won't run or decompress, we'll refund your download time.

...**OUT OF THIS WORLD ENTERTAINMENT:** NovaLink is the exclusive host of Legends of Future Past, the most enjoyable multiplayer interactive fiction game ever developed. Legends is the recipient of Computer Game Review's Golden

Triad Award and a nominee for Computer Gaming World's 1993 On-Line Game of the Year.

...**AFFORDABLE FARES:** Wait for darkness no more! NovaLink is affordable no matter how fast you connect or at what time. Our basic charge of \$9.95/month includes five (5) hours of daylight access time. Beyond this, direct dial and telnet access to NovaLink is only \$1.80/hr. Local network dial-up access is only \$1.80/hr more. There is no surcharge for daytime access or 9600 baud.

...**TEST FLIGHTS:** Give NovaLink a call and sign-up today. You'll receive two hours of online time free with your membership, and if you change your mind, we'll refund the \$12.95 sign-up fee.

**NovaLink<sup>SM</sup>**  
MAKING THE WORLD A BIT SMALLER

**800-274-2814 Voice**

**800-937-7644 Sign-up/Info**

info@novalink.com • telnet novalink.com  
P.O. Box 11, Shrewsbury, MA 01545

been scheduled for Sunday morning if needed. Anyone with any ideas for forming a national association should plan on attending these sessions. I doubt there will be a second chance to be on hand at the beginning.

Graphics gets a good bit of attention this year. Mustang Software will be showing off their Qmodem with Remote Imaging Protocol, as will deltaComm Development's TELIX. Phil James of DataStorm Technologies, developer of the Procomm terminal package hosts a session on the future of data communications that is expected to touch on the graphics theme. All the BBS software vendors have scheduled sessions on graphics implementation for bulletin boards - several with some surprises. The Telegrafix crew will be holding several sessions on how to implement Remote Imaging Protocol - RIP. But despite the strong backing for RIP among many vendors, there are still some contenders in other technologies. Seth Hamilton insists ROBO-BOARD is the answer and has some pretty impressive JPEG style photo-realistic imaging techniques to back up his claim. Dave Hughes and an assortment of NAPLPS enthusiasts don't think the battle is done yet either. Since some of these technologies, such as RIP, actually came out of ONE BBSCON 92, we expect the meeting this year to be key in determining the graphic interface you'll see on bulletin boards in the future.

In technology, chipmaker Rockwell will be moderating two panels of modem vendors in discussing the future of modem technologies - and we expect some pretty major announcements on that front. Northern Telecom is doing a presentation on implementing ISDN, CompuServe Network Services will be showing how to connect bulletin boards to X.25 networks, and Quarterdeck Office Systems is presenting two sessions, one on how to make DESQview work for communications applications, and one specifically on memory management for bulletin boards.

On the social front, Jim C. Warren hosts a panel on the public's right to access government information. Brenda Donovan heads up a discussing of women online. Tim

Stryker presents more on electronic democracy.

A good deal of interest in the convention has come from government BBS operators and the educational community. Bob Davis heads up a panel loaded with operators of government bulletin boards. And several sessions on the use of telecommunications in education are emerging.

Finally, Jack Rickard and Phil Becker have reprised their immensely popular How To Profit with a BBS track from last year - and it's stronger than ever. Teleflora has made the move to actively seek the BBS market by providing credit card merchant accounts and Dave Jones will be onhand to discuss some of the ins and outs of taking credit cards online - and processing them automatically.

David Kennedy of Deloitte and Touche, one of the top venture capital firms in Texas discusses business plans for bulletin boards. Pat Clawson also addresses capital formation, and Simon Clement returns with his business plan for online services.

Sheri Robert PR personette for Galaticomm, and David Carlson, of the Albuquerque Tribune, again team up to discuss guerrilla marketing tips. David Coursey of PC Letter heads up an all-star panel of computer magazine journalists who coach on how to approach journalists with your story.

Two of the most popular sessions from last year were the BBS success roundtables - one for chat services and one for subscription bulletin boards. These are panel discussions manned by BBS operators who have made the transition to professional BBS operator and currently run successful, financially profitable bulletin boards as their full time vocation. Scott Brinker of Galaticomm heads up the chat roundtable with Dean Kerl Garbage Dump BBS, Michael Allen of Odyssey, Bruce Lomasky of Bruce's Bar and Grill, and others. Kevin Behrens of Aquila BBS moderates the subscription BBS success panel with Andy Keeves of Executive Network, Dan Linton of Software Creations BBS, Greg Ryan of EXEPC, and Norm Henke of PC-Ohio.

A newly featured session in the profit track is the Building Online Community session presented by John Coate and Cliff Figallo. One element that has emerged among successful bulletin boards, and is almost never present in the failures, is the concept of community. Coate and Figallo built The Whole Earth 'Lectronic Link (THE WELL) into a profitable enterprise of over 5000 subscribers solely on the basis of this concept of community, and they team up for a presentation on what it is, how to develop it, how to keep it, and how to keep from losing your hair in dealing with it. This promises to be one of the best sessions ever presented on how to deal with the public and foster a sense of online community on your BBS. If you run a BBS of any kind, or for that matter have been present in a room with an RJ-11 jack while using a computer, you won't want to miss this session.

Another new session in this year's profit track is the commercial service operators roundtable discussion. Steve Laliberte of BIX heads a panel of representatives from CompuServe, GENie, America Online, and Prodigy to discuss the problems of scale that come up when your callers number in the thousands and hundreds of thousands, and prognosticate a bit on where they think the services of the large commercial services is headed in the future.

Among the notables, Ward Christensen, who wrote the first BBS software program CBBS and started the first BBS, will do an hour long presentation on how it all got started. Sparky Herring will describe the evolution and future of the .QWK offline reader file format. Ted Nelson will be on hand with a presentation of his Xanadu program - essentially how to publish your writings online and receive royalties from them. The BBS software authors will of course be there, including Fred Clark of PCBoard, Andrew Milner of Remote Access, Phil Becker of TBBS, Frank Larosa of Searchlight, Jim Harrer of Wildcat!, Tim Stryker of The Major BBS, and many more.

The result is some 150 speakers in over 140 sessions will be presented in the course of the convention - undoubtedly the most aggressively



## CONTACTS

### Wyndfields for Windows

Wyndware  
One Parker Place, Suite 308  
Janesville, WI 53545  
Registration Fee: \$99

### WinWord Office Power Pack (WOPR)

Pinecliff International  
Advanced Support Group  
11900 Grant Place  
Des Peres, MO 63131  
(800) 659-4696  
Registration Fee: \$49

### Readability Plus

Scandinavian PC Systems  
6 Nelson Street  
Rockville, MD 20850  
Registration Fee: \$25

### QEdit

SemWare  
4343 Shallowford Road,  
Suite C-3  
Marietta, Georgia 30062  
Registration Fee: \$55

overdone educational event in the history of PC telecommunications. Over 125 product vendors will exhibit on 25,000 square feet of display exhibit space and most are planning very aggressive show special discounts and new product introductions just for this convention. A new online service operators association will undoubtedly grow out of this meeting.

A full file containing the complete details of the ONE BBSCON session plan is available on the ONE, Inc. BBS at (303)693-5432 as 1BBSCON.ZIP or on the Boardwatch BBS under the same file name. FidoNet aficionados can file request 1BBSCON.ZIP from 104/555. Internauts can send e-mail to FTPMAIL@BOARDWATCH.COM with the statement GET 1BBSCON.ZIP anywhere in the body of the message. The file will be sent by reply mail in uuencoded form. Registration at ONE BBSCON is

\$250 through July 31, and \$325 from August 1 to August 25. To register by voice, contact ONE, Inc., 4255 South Buckley Road, Suite 308, Aurora, CO 80013; (303)693-5253 voice; (303)693-5518 fax.

## SOFTWARE NOTES

### LOOKING AT SHAREWARE

By Jim Thompson  
Western News Service

WNS — This month, I'll take a look at a program that will help you improve your writing, some powerful Microsoft Word add-in, a fast text editor and a simple but effective relational database.

### WYNDFIELDS FOR WINDOWS

If you are looking for a good relational database for Windows, Wyndfields for Windows is a good choice. It is both easy to use and has plenty of sophisticated features.

Even if you have no previous experience with databases, you should have no problems with this one. Button bars and dialog boxes provide easy access to all the options for creating fields and all new databases. This same interface also makes it easy to design reports.

Other features include the ability to create reports, mailing labels and linked fields. Thanks to the Windows interface, you can open several databases at one time, shrink them to icons and switch between them.

### WIWORD OFFICE POWER PACK (WOPR)

Microsoft Word for Windows is the hottest selling word processor for computers — and with good reason. It offers some of the most sophisticated features available in any word processor package. But even with all this functionality, there are still some things it lacks. This is where WinWord Office Power Pack comes into play.

Included in this full-featured package

are macros that allow you to delete files from within WinWord, count the number of words in a document and even display the character value and Windows ANSI-screen representation.

There is also a program that will speed up the addressing of envelopes. It is far better than the envelope package that comes with WinWord. It allows you to include logos, bar codes, notes and multiple address in any font and size you want.

A program named Two by Four lets you print booklets and even print four pages on every single sheet of paper. FileNew allows you to choose any of the templates for creating new files you have designed in WinWord.

If you are tired of looking at the dull gray tool bar across the top of the WinWord screen, WOPR allows you to create icons of your own.

For the power user, WinWord Office Power Pack macro library's collection of macro functions gives a real boost to getting to the core of the powerful WinBasic programming language.

This one is a real winner, and a must if you use Microsoft Word for Windows.

### READABILITY PLUS

Not everyone is perfect when it comes to proper grammar and style. We can all use help. Unfortunately, most of the commercial grammar checkers are too big, too slow or just plain boring. As a result, they rarely are used.

Readability Plus is certainly no entertainment bonanza, but it will give you the facts you are looking for quickly and easily. It is much different than any style checker you have seen because it performs a mathematical analysis on your writing.

After checking the average sentence, word and paragraph length, it creates four different indexes that analyze your writing style. It also reports on the most commonly used words and on the percentage of words that are less common, then issues a report.

# RIP - a new standard!

## Graphics on a BBS?

**QmodemPro has it... NOW!**



Every major BBS developer has announced support for the new Remote Imaging Protocol (affectionately known in the BBS community as RIPscrip).



It shouldn't surprise you that QmodemPro is the first full-featured communications package out of the gate with RIPscrip. QmodemPro didn't get the reputation of being the BBS caller's best friend by taking months or years to implement new features.

RIPscrip offers presentation-quality graphics, similar to those found on graphics-based online services such as Prodigy and America Online. Menu selections are just a mouse-click away.

Mustang Software, Inc. proudly offers this new standard for a fully graphical BBS-terminal interface...

**WITHOUT** making you give up the quality and ease of use you've come to expect from your favorite communication program, QmodemPro.

### Features!

Here's what QmodemPro 1.5 offers you...

- A standard graphical interface which works on any system supporting RIP graphics.
- Integrated offline mail on any QWK-compatible BBS, CompuServe E-Mail and MCI Mail. Built-in 120,000 word spell checker, even using your favorite word processor or text editor.
- Powerful script language with QuickLearn.
- Twelve popular transfer protocols including Zmodem, CIS B+ and Kermit.
- Full network support via Interrupt 14, NACS, NASI, AriCom and Digiboard.
- Built-in support for sendFAX, high speed modems, and more.
- Awesome 4095-entry Phonebook allows multiple phone numbers per BBS, attached notes, group dialing, automatic tagging and dialing entries with outgoing mail, and powerful sort options.

### What are you waiting for?

If you're already a registered QmodemPro customer, download your free QmodemPro version 1.5 upgrade and experience RIP graphics today.

If you haven't tried QmodemPro, you haven't experienced the best in modem telecommunications today. Find out why QmodemPro is "The BBS Caller's Best Friend." QmodemPro is available through Software, Etc., Walden-Software, CompUSA, and other fine software resellers, or directly from Mustang Software.

**There's no need to wait any longer.**  
Call 800-999-9619 to find out how you can start using the ultimate in telecommunications software.

Mustang Software, Inc.  
P.O. Box 2264 Bakersfield, CA 93303  
(805) 395-0223 Fax (805) 395-0713  
BBS (805) 395-0650



Readability Plus displays all this information in a variety of colorful, detailed charts and graphics. It also compares your writing against ideal models of different kind such as fiction, advertising and general writing.

Readability Plus was originally a commercial program selling for \$129. It became shareware when a more powerful style checker called Corporate Voice was released.

## QEDIT

This old standby is still, at least in my book, one of the best text or "programmer's" editors available. I use dozens of different word processors, but always return to this one for certain tasks.

QEdit is certainly no rival for Word for Windows or WordPerfect, but it is fast, powerful and very easy to use. Also, there are times when you just want to write a quick ASCII document or make a fast change to a program or batch file. QEdit fills the bill nicely.

To start it, just type Q. Menus along the top provide access to most of the

functions. Best of all, you can customize all the keys and create macros so it will emulate your favorite word processor. So, if you are used to pressing ALT+P to print a document, you can program QEdit to do it also. This makes learning and using the program a breeze. I highly recommend this one.

## ALPHA WINDOWS: A NEW LOOK FOR YOUR BBS?

by Bill Gram-Reefer

You probably haven't heard of it yet, but Alpha Windows (AW) is an interesting, new, cross-platform standard for windowing applications promoted by the Display Industry Association (DIA). Although not targeted directly at BBS applications, nor positioned as a GUI graphics standard like NAPLPS or RIP, AW may yet have an impressive impact on how users, as clients, will communicate with commercial and hobbyist BBSs.

The prime consideration in the development of AW was maximizing the

efficiency of signal transmission over low-speed serial lines. In many respects, AW is a windowing protocol analogous to an extended VT220 set of functions. It removes all windowing functionality from the host side, instead placing it on the client side. From a BBS perspective, this technology should create many new opportunities in that it is the first windowing protocol to achieve broad-based

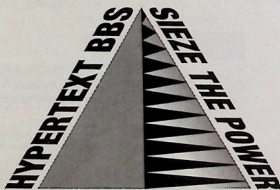
industry acceptance, and as such, provides for a standard way to provide advanced BBS interfaces for cross-platform applications.

Not unlike America Online, Prodigy, or even the batch of Macintosh GUI clients from FirstClass, ResNova, Spider Island, and XBR, AW users run a local terminal program to connect to the host, where the client takes care of most of the graphics and windowing instead of the host, thus allowing maximum throughput for data rather than clogging the serial connection with all sorts of graphical formatting information and screen instructions. Unlike the proprietary Mac clients, however, each client version, written for specific platforms still will be able to see essentially the same picture regardless of what sort of BBS it is connected to, as long as the host supports AW.

Rasmus Lerdorf is president of Nutec Corporation, developers of Nutec Desktop, an AW-based multitasking windowing system for Unix terminals. He likes to demonstrate his software with a 14.4 modem and graphical serial terminal. He plops the terminal down on a desk, connects the mode to a phoneline and dials his Mountain View, CA office. To show off the efficiency of the windowing protocol, he'll make a connect at 2,400 bps and use the graphical interface. Since window manipulation and content is stored locally, Lerdorf can drag the window around the screen no matter whether he's connected at 300 or 14.4 bps. He demonstrates that the stacking order isn't affected by the line speed, either.

In BBS terms, Nutec Desktop is backward compatible with standard ASCII terminals, including support for other standard emulations including ANSI, VT100, VT220, and Wyse60. Even though the client terminal may have some other native emulation, by choosing one of these other standard "virtual emulations" the user actually instructs the application to see the terminal in that prescribed manner. This means that if someone were to add AW capability to their BBS software, people who connected with AW program-equipped terminals would get a high-resolution, Motif-style interface,

□ SAGENET HYPertext BBS SAGENET HYPertext □



**SAGENET™**

**BBS 304-725-5227**

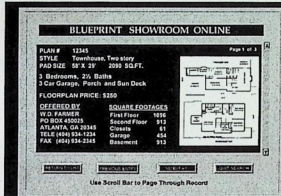
**FREE GUEST CONNECTION**

# Your Application Online...In Days!

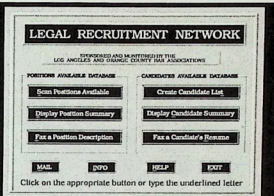
## Save Time, Money, and Resources

The Business BBS is the premiere online systems service bureau. We design, build, operate and maintain custom online services on our equipment, at our facility. Your application can be built, tested, and online in days. Ease of use is assured, even for inexperienced users.

We tailor menus, databases, and other online service features to meet your specific business needs. Our applications tool kit includes the industry's most expansive feature set and a variety of database engines. A crisp, clean, mouse driven, button activated optional business Graphical User Interface is available.



Combine our online expertise with your business and customer knowledge to build efficient, easy to use integrated applications. You control information, content, features, and user access, with complete security.



**Announcing Integrated Line Art Accessible... Without Downloading**

We Tailor Menus, Databases, and other Online Service Features to Meet Your Specific Business Needs.



Business Graphics Customized for your Application

## The Business BBS

Voice (310) 477-0593 • Modem (310) 477-0408 • Fax (310) 477-9475  
2531 Sawtelle Blvd., #109, Los Angeles, CA 90064-3163

complete with mouse and display-Postscript support; while people who continued to use their standard ASCII-type terminal programs, like Procomm or Telix, would get a character interpretation of the windowed environment. They would still have all of the same functionality of the windowed environment, but without the graphical look and support for the mouse.

What Nutec Desktop is really designed for is to allow terminals to run any number of unmodified Unix applications in the windows instead having just one screen and program to work with. Even so, the implications for future BBS design and implementation is clear. AW is going to be a major force for serial terminal windowing in the future. The DIA standard defines a simple and efficient, low-bandwidth windowing protocol that gives both software and hardware vendors clear guidelines for developing new communications products.

Nutec Corporation, 2685 Marine

Way, Ste #1319, Mountain View, CA 94043 (800) 4NUTECW voice; (415) 988-9782 fax. The Display Industry Association can be reached at 415-967-6888.

Bill Gram-Reefer, based in Concord, CA, is president of WORLDVIEW, specializing in connectivity and communications. E-mail Bill at: [wk05156@worldlink.com](mailto:wk05156@worldlink.com)

### YOUR BBS AND DESQview - MORE BBS FOR YOUR MONEY

by: Michael Chapman,  
Quarterdeck Office Systems

Running a BBS is additive, as any sysop will tell you. The very first time you see a caller log in to YOUR system, your heart beats a little faster and a certain pervasive joy fills you, as you contemplate the efforts you've made to go online and know that your users will enjoy using your board. Often, the very next thought

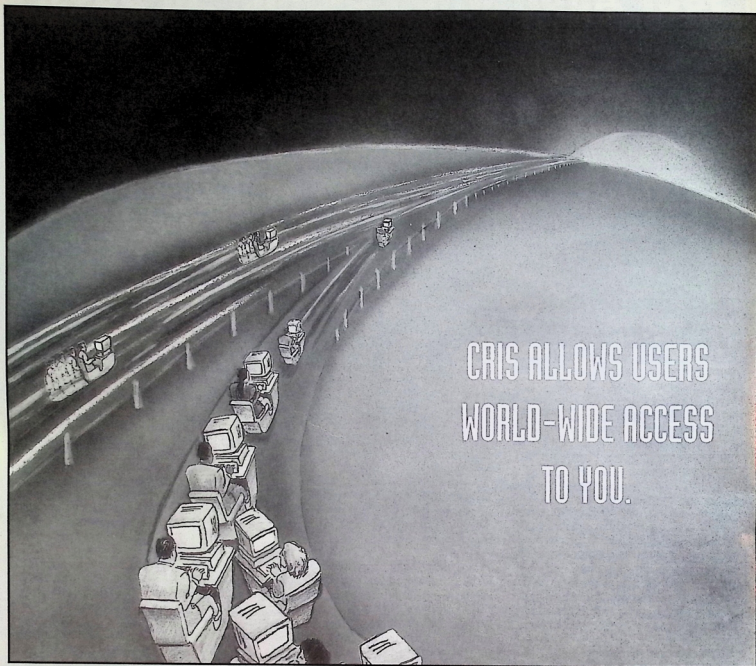
that floats through your mind is "I should add more nodes", and suddenly, that joy can dissipate as you envision the effort you've already put in, multiplied in turn by each node you add.

There are a couple of different approaches to multi-line BBSes. One, which is certainly a valid solution, is to dedicate a machine to being nothing but a BBS, and there are many BBS software packages available that will perform their own multitasking. This largely relieves the sysop of having to worry about multiple applications and their mutual compatibility, since the platform is dedicated to one application, but it also precludes using the computer for anything else without bringing the BBS down.

However, for those who do not have the desire nor the resources to do this, a multitasking environment is necessary. Such an environment needs to be as lean and efficient as possible, thus leaving more system resources for the BBS and other



# SYSOPS: ONRAMP TO CRIS NOW!



CRIS ALLOWS USERS  
WORLD-WIDE ACCESS  
TO YOU.

**CRIS IS A FULL SERVICE INFORMATION PROVIDER THAT  
WILL HELP YOU:**

- ✓ Expand your user base
- ✓ Increase your availability
- ✓ Generate revenue
- ✓ Broaden your exposure

**CALL CRIS NOW:  
1-800-745-CRIS**

E-MAIL  
Major net: [simon@crc](mailto:simon@crc)  
Internet: [jim@cris.com](mailto:jim@cris.com)



226 East 54th Street,  
New York, NY 10022  
Phone: 212-753-2544  
Fax: 212-935-5635

# Searchlight 3.0

## Easier to Use

Your users are the key to your bulletin board's success. Make things easy on them, and they'll be back for more. Confuse them with a poor user interface, and they'll look elsewhere.

At Searchlight, we *specialize* in creating friendly, highly usable interfaces that you and your callers will love. Back in 1987 we were the first product to offer full screen text editing and we're still the only one that gives you a complete full screen interface. Instead of clunky text prompts, you'll find comfortable menu bars, input boxes, full cursor control, and even online mouse support.

## RIP Graphics

In 1993, Searchlight is pioneering online graphics technology. Our programmers helped design the new non-proprietary RIP graphics protocol that is quickly becoming a BBS industry standard, and Searchlight 3.0 is the first BBS product with internal RIP support. With RIP, you can design startling high resolution graphics interfaces like the ones shown here, complete with pictures, icons, fonts, mouse buttons, and more. You can even add graphics to messages! RIP offers an exciting new way to look at BBSing, and Searchlight 3.0 has it right now.

## Powerful Features

At Searchlight, we think messages, conferences, files and nodes should be limited only by system resources, not arbitrary numbers. You shouldn't need an external "doorway" program just to run remote DOS shells. In fact, all of your maintenance programs and utilities should operate from a remote location as easily as they do locally—and they should be complete so you don't have to spend hundreds more for add-ons.

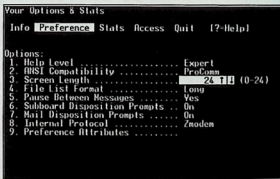
Running a multiuser system? Too bad all BBS software doesn't include Intelligent DigiBoard™ support at no extra cost so you can run up to 10 lines on a single PC with DESQview and still use all your favorite DOS-based Doors. We support LANs, Windows and OS/2, too.



With Searchlight 3.0 and RIP, your BBS can have amazing graphics without giving up DOS or using a proprietary terminal package. This entire login screen is just 2,746 bytes!



Combine Searchlight's famous menu-building features with RIP graphics to produce elegant, mousable menus. Using your BBS has never been easier.



Even in plain text mode, Searchlight's menu bars and input boxes give you full-screen functionality with virtually any ANSI/vt100 terminal.

If you don't see it listed here, it's probably because we ran out of room:

- Full-screen text editor with quoting
- DigiBoard & FOSSIL support included in every version
- Internal Zmodem protocol
- QWK, Fidonet & UTI support
- Totally configurable menu editor
- CD-ROM support
- DOOR.SYS, PCBOARD.SYS, and DORINFO.DEF support
- Relational links to user file from mail and conferences
- Full maintenance while system is taking calls, even from remote
- One-keystroke file tagging
- Over 16 million security profiles
- Supports virus-checking software
- Upload directly to message editor
- Up to 15 external protocols
- True private mailboxes for all users
- Fidonet private netmail with nodelist lookup, mail routing and more
- Requires just 250K RAM per node
- ANSI & RIP auto-detect
- Forward, kill, or download entire message threads with one command
- First upgrade free

\$ 99	.....	single line
\$179	.....	1-3 lines
\$299	.....	1-10 lines
\$399	.....	unlimited



**SEARCHLIGHT**  
1-800-780-LITE

Visa/MC/AmEx/Discover  
or request information  
and test drive disk

516-751-2966 • BBS 516-689-2566  
P.O. Box 640, Stony Brook, NY 11790



Change a Program

Program Name..... WordenPro

Keys to Use on Open Menu: F5 Memory Size (in K): 400

Program... worden.exe

Parameters:

Directory... c:\mppro

Options:

Writes text directly to screen.....	[N]
Displays graphics information.....	[N]
Virtualize text/graphics (V,M,T).....	[V]
Uses serial ports (V,M,1,2).....	[2]
Requires floppy diskette.....	[N]

Press F1 for advanced options Press ← when you are DONE

applications. It also needs to be capable of dealing with multiple hardware devices concurrently, without danger of losing critical data from those devices. Fortunately, such an environment does exist: DESQview. DESQview meets all of the criterion above and is the multitasking environment of choice among BBS operators.

### Why DESQview?

Since its inception in 1984 as "DESQ", the developers of DESQview have been keenly aware of the special considerations that communications programs require. In order to understand how DESQview is well-suited to communications tasks such as BBSes, let's explore some of the pertinent details and terminology involved.

Probably the most important term to understand when discussing DESQview is multitasking. Multitasking, as its name implies, refers to the "execution by a single central processing unit (CPU) of two or more programs at once, either by simultaneous operation or by rapid alternation between the programs" (MultiLex Dictionary, v.3.00). We tend to expand this definition a bit, since we believe that true multitasking can really only occur with multiple CPUs, but the real-world definition is very much in line with the dictionary definition. DESQview utilizes the latter method described in the definition, e.g., rapid alternation between programs. We refer to this process as "time-slicing".

The timer in a PC "goes off" 65,536 times an hour, which results in 18.2 timer "ticks" per second. This is necessarily independent of the CPU's speed itself, since the primary purpose of the ticks is to have a regular pulse to measure time intervals. Thus, DESQview monitors these ticks, and utilizes them to distribute CPU time to each task active within. This is what we call "time-slicing": each active task receives a slice of the CPU's attention.

DESQview achieves this seemingly impossible task through a number of mechanisms. Most notably, it is DESQview's unique use of expanded, and more specifically, mapped memory, that makes all of this possible. An expanded memory manager such as QEMM must be loaded in order for this functionality to be available; otherwise, DESQview will only have conventional memory to use. Using mapped memory, DESQview is able to switch between programs very rapidly, saving the critical data for each and restoring that information for the current application. Thus, multitasking is made a reality, and a user can have many applications open at once, each performing its tasks independent of each other, or by using the DESQview API (Applications Programming Interface), they can also share information with each other.

### In One Port and Out the Other

From the above, we can see that the multitasking structure of DESQview lends itself well to multi-node BBSes, while also providing an environment

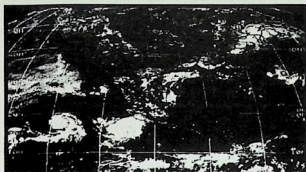
from which other tasks may be concurrently performed. DESQview can accommodate the most demanding hardware configurations, and the multi-node BBS is certainly one of the most complex environments in the computer industry. There are some valuable tricks and tips to setting up the inherent hardware and BBS software with DESQview, so let's take a look!

It is historically important to note that the PC's original design never included a second serial port. It was believed that only one would be necessary, and it was only as an afterthought that a second port was added. This second port occurred primarily because there was an unassigned IRQ available. This explains in part why COM1 uses IRQ 4, but COM2 uses IRQ 3.

The serial ports (COM ports) of a PC are the means through which BBS or telecommunications software do their "talking" to the outside world. Generally speaking, an AT class machine is only capable of supporting 4 standard COM ports, and a PS/2 machine is capable of supporting 8 COM ports. If a sysop wants to have more COM ports than this available for a multi-node BBS configuration, there are special multiport boards sold for this purpose which can accommodate as many as 16 ports per device. Since these differ from normal serial port configurations, we will deal with them a bit later on.

DESQview is not particularly fussy about programs that use serial ports. Even if badly misconfigured, most comm programs will operate quite well inside of DESQview. There are some special options that DESQview offers for maximum efficiency. The first of these is found on the "Change a Program" information screen. This is accessed by first tapping the ALT key to bring up the DESQview menu, pressing O for Open Window and then CP for Change a Program. DESQview will then ask you which program you wish to change; you may enter the two letter combination associated with the desired program or click on it with your mouse cursor.

Note that this field tells DESQview the program being executed plans to use the serial ports. "Y" means that



### Centrally Located on Planet Earth

Online since 1982, Nautilus Commercial Data now offers 250,000 public domain files and 200 incoming lines. We support 38,400 baud throughput, with 14,400 baud CCITT V.42bis compatibility. Our corporate fileserver supports 28 Gigabytes of on-line storage, complete with HOURLY U.S. and WORLD News updates, and multiple daily Satellite Weather Images of Earth. (No charge to examine system!) With THOUSANDS of GIF images, dBASE files, 1-2-3 Templates, Word Processors, Clip Art, Telecom packages, and GAMES, we're your 1-Stop Get-It-All-Here system.

- VISA/MC/OPTIMA/AMEX Accepted -

**Data: (316) 365-7631**  
(8.N.I. - IBM/ANSI/Color Supported)

Nautilus Commercial Data System  
P.O. Box #645 / Iola, KS 66749  
Voice Mail/FAX: (316) 365-7359



## Looking for Internet & Usenet for your BBS?

### Here are the facts:

#### Internet:

Over 30,000,000 people have access to it  
Interconnects all major networks around the world  
Mail moves around the globe in seconds

#### Usenet:

Over 4500 newsgroups (conferences)  
45 Megs per day for all newsgroups

#### PCBoard BBS:

65000+ conference areas  
Extra long address and subject fields  
Built-in seamless file-attachments

#### PCB-UUCP:

Super fast performance  
Handles Mailing Lists (10,000+ Binned Mailing Lists)  
Built-in LISTSERV function for your own mailing lists  
Redistribution of mail and news to downstream systems  
Powerful configuration and installation program  
Works with PCBoard 14.x / 15.0 and PageSat



**Merlin**  
Systems

613-236-1138/613-236-1481 BBS  
info@merlin-systems.on.ca



**PCBoard.**  
Professional Bulletin Board Software

801-261-1686/800-356-1686  
info@clarkdev.com

### C-D-S BBS!

#### Open House

### FULL FREE DEMO!

*We've got what you need*

100's of CHATters NIGHTLY  
National News Services  
Online GAMES & Prizes \$\$  
ULTIMATE ADULT CLUB!

Financial News  
Original CDS GIF's!!  
Business Services!  
CHAT! CHAT! CHAT!  
CURRENT Stock Info!  
FIDOnet/HOTnet/Doornet  
GAMESnet/Throbnnet!  
Many SOCIAL CLUBS!  
Online FAX Services!  
Meet people ONLINE!!  
Investigative Services

*More than THIS ad can take!!*  
**CHECK US OUT TODAY!**  
**25 HIGH SPEED LINES!**  
> > 512-887-0787 < <



SysOp: Blackhawk  
SysOp: Heather  
SysOp: Sir Laurence  
SysOp: Lady Tanya

*Bound for Pleasure*  
**BBS**

Serving the Needs of the **D/s** Community

Cambridge, Massachusetts

**617-374-9255**



any of the serial ports reported by the BIOS will potentially be used, "N" means that the program will not use any serial ports, and "1" and "2" refer to COM1 and COM2 respectively. Since the PC's original design only accounts for COM1 and COM2, this is all that DESQview pays attention to, although there is absolutely no problem with using COM3 or COM4. The "attention" I refer to here is that if DESQview is told that the program in question will use COM1 (a setting of 1 in the "Uses Serial Ports" field), it will "hide" the address of COM2, thus preventing the program any access to that COM port. Mice or other pointing devices that are connected to a serial port do NOT count when regarding this field; mice are handled completely independently by DESQview.

In a communications program, it is critical that this field be set correctly. If the modem is using either COM1 or COM2, the field should be set accordingly with a value of either 1 or 2. If the program is using COM3 or COM4, the value should be set to "Y", since this will allow the program access to any serial ports reported by the BIOS.

Each COM port you have configured on your PC must have an independent IRQ (Interrupt ReQuest line). The IRQ provides the means by which the COM port can request the CPU's attention. DESQview cannot distinguish COM ports if they are on the same IRQ, just as your software cannot. Each COM port "must" have a separate IRQ and a separate port address in order to function at the DOS prompt, let alone from within DESQview. Ensure that all COM ports can be successfully activated via your software outside of DESQview before attempting to use them inside of DESQview.

The issue of unique IRQs for each COM port you plan to use brings up a particularly sticky problem. COM1 and COM2 have established IRQs and port addresses, but COM3 and COM4 lack this standardization. As a result, COM3 shares the same IRQ as COM1 and COM4 shares the same IRQ as COM2. It is easy to see that this presents an immediate problem for the potential multi-node BBS. There are two possible solutions. One is to use a serial I/O card that is

easily configured to support a wide range of port addresses and IRQs. These cards are now common and make adding more serial ports a snap.

The second solution is to use what is known as a FOSSIL driver. FOSSIL is an acronym for FIDO-Opus-Seadog Serial Interface Layer, and was developed by the architects of those BBS software systems to facilitate electronic mail exchange between systems with dissimilar serial port structures. FOSSIL drivers can be used in a number of different ways. The easiest way is to use BBS software that is written to "talk" to these FOSSIL drivers, which essentially handle all serial I/O routing, thus making it unnecessary for the software to talk to the serial ports directly. Instead, they send and receive all information through the FOSSIL driver, which in turn manages the interchange of information between the sender and receiver. Another method for using a FOSSIL driver involves a specific driver, called X00.SYS, written by Edmund Gwynn. X00 is capable of handling serial ports assigned to the same IRQ, thus enabling an IRQ to be "shared". This, of course, is a direct contradiction of the "one port, one IRQ" rule, but . . . rules were made to be broken! X00 assigns its own "port" number to each device it controls, and thus it becomes possible for many devices to coexist using a very limited amount of resources. When used in this manner, X00 must be loaded and active before starting DESQview. X00 is also often used in conjunction with the previously described method of using software that "knows" about FOSSIL drivers.

Since FOSSIL drivers handle all serial I/O for the programs attempting serial communication, DESQview can be told that the program is NOT using serial ports in the "Change A Program" information, since, after all, the program is communicating with the FOSSIL driver, and not the hardware serial port itself.

#### WHOSE IRQ IS IT ANYWAY?

DESQview has one other special feature that is important in the successful operation of communications programs. This can be found in

DESQview Setup, which is invoked at the DOS prompt by typing SETUP in the DESQview directory, by adding it as a program in DESQview, or from within DESQview by typing DVSETUP in a DOS window. The feature is called "Optimize Communications", and can be located by selecting Performance under the Advanced Setup options. "Optimize Communications" is documented to accept parameters of either "Y" for Yes or "N" for No. When this field is set to "Y", the order of precedence for IRQs is changed. In order to understand how this works, refer to the chart below:

IRQ	OWNER
0	System Timer
1	Keyboard
2	Unused **
3	COM2/COM4
4	COM1/COM3
5	Unused (or LPT2)
6	Floppy controller
7	LPT1

\*\* - Generally unused. IRQ2 can have special meanings or purposes depending on the BIOS

This is the first bank of IRQs (Interrupt Request lines), and the default purposes they serve, without any memory management or multi-tasking going on. This is analogous to setting "Optimize Communications" to N. The IRQs that affect standard serial ports can be seen here. Normally, the system timer (IRQ 0) gets precedence over

# DSC

\* ftp & telnet from DSC  
\* Fresh Adult GIFS Daily  
\* 8 Gigabytes

\* 2,500 Conferences from;  
ILink, Rime, Annex, Usenet,  
Internet EMail, SmartNet,  
FidoNet, AfterDark,  
AdultLinks & ThrobNet

FAST ACCESS w/VISA & MASTERCARD  
1200/2400e (215) 443-9434  
v.32bis (215) 443-7390  
USR HST/DS (215) 443-5830

## BBS MODEM DISCOUNT PROGRAMS

VENDOR	MODEL	LIST	SYSOP	BBS	VOICE	FAX
AT&T Paradyne	Dataport 14.4FAX	\$555	\$222	813-532-5254	813-530-2000	813-530-2398
AT&T Paradyne	Dataport 14.4	\$515	\$206	813-532-5254	813-530-2000	813-530-2398
ATI Technologies	9600 ETC-E	\$499	\$275	416-756-4591	416-756-0718	416-756-0720
Cardinal Technologies	9600V42 V.32	\$349	\$219	717-293-3074	717-293-3000	717-293-3104
Cardinal Technologies	14400V42 V.32bis	\$449	\$249	717-293-3074	717-293-3000	717-293-3104
Computer Peripherals	Viva 9624e V.32	\$349	\$249	805-499-9646	805-499-5751	805-498-8306
Digicom Systems	ScoutPlus V.32bis	\$389	\$210	408-262-1412	408-262-1277	408-262-1390
Digicom Systems	Scout V.32	\$299	\$195	408-262-1412	408-262-1277	408-262-1390
Galaxy Networks	UFO V.32bis	\$999	\$299	No BBS	818-998-7851	818-998-1758
GVC Technologies	FM-9696/144V V.32bis	\$689	\$413	201-579-2380	201-579-3630	201-579-2702
GVC Technologies	SM-96V V.32	\$599	\$329	201-579-2380	201-579-3630	201-579-2702
Hayes Microcomputer	Ultra 144 V.32bis	\$999	\$249	404-446-6336	404-840-9200	404-449-0087
Hayes Microcomputer	Optima 144+Fax	\$519	\$179	404-446-6336	404-840-9200	404-449-0087
Hayes Microcomputer	ISDN System Adapter	\$1199	\$450	404-446-6336	404-840-9200	404-449-0087
Image Communications	Twincomm 9600 V.32	\$299	\$279	No BBS	201-935-8880	201-935-6548
Intel Corporation	14.4EX V.32bis	\$549	\$269	503-645-6275	503-629-7000	503-228-9707
Intel Corporation	9600EX V.32	\$599	\$299	503-645-6275	503-629-7000	503-228-9707
Multi-Tech Systems	MT932BA V.32	\$869	\$435	612-785-9875	612-785-3500	612-785-9874
Multi-Tech Systems	MT1432BA V.32bis	\$899	\$450	612-785-9875	612-785-3500	612-785-9874
Practical Peripherals	PM14400FXSA V.32bis	\$549	\$250	805-496-4445	805-497-4774	805-374-7202
Practical Peripherals	PM14400FXMT V.32bis	\$399	\$200	805-496-4445	805-497-4774	805-374-7202
Quadralink Technologies	1496V+	\$360	\$320	416-538-9999	416-538-0101	416-538-1355
QuickComm	Sprite II V.32bis	\$249	\$220	408-956-1358	408-956-8236	408-956-1345
Supra Corporation	SupraFAX V.32bis	\$399	\$249	503-967-2444	503-967-2400	503-967-2401
Supra Corporation	SupraFAX V.32	\$299	\$199	503-967-2444	503-967-2400	503-967-2401
Telebit Corporation	T3000 V.32bis	\$949	\$399	408-734-3861	408-734-4333	408-734-3333
Telebit Corporation	WorldBlazer	\$1049	\$429	408-734-3861	408-734-4333	408-734-3333
Telebit Corporation	QBlazer V.32bis	\$549	\$299	408-734-3861	408-734-4333	408-734-3333
U.S. Robotics	Courier DS V.32bis/Fax	\$1295	\$449	708-982-5092	708-982-5010	708-982-0823
U.S. Robotics	Courier V.32bis/Fax	\$695	\$299	708-982-5092	708-982-5010	708-982-0823
U.S. Robotics	Courier HST V.32bis/Fax	\$995	\$349	708-982-5092	708-982-5010	708-982-0823
Ven-Tel	EC96 V.32	\$699	\$439	408-922-0988	408-436-7400	408-436-7451
ZyXEL	U-1496 +V.32bis	\$989	\$549	714-693-0762	714-693-0804	714-693-0705
ZyXEL	U-1496E+V.32bis	\$649	\$399	714-693-0762	714-693-0804	714-693-0705

all other IRQs, and the order in which incoming IRQs are handled proceeds in a linear fashion, giving next precedence to IRQ 1, then IRQ 2, and so on. When "Optimize Communications" is set to Y, the precedence now becomes:

IRQ	OWNER
2	Unused **
3	COM2/COM4
4	COM1/COM3
5	Unused
6	Floppy controller
7	LPT1
0	System Timer
1	Keyboard

\*\* Precedence is given to IRQ2,

since many network cards operate on this particular IRQ. Note: if a mouse is connected to a COM port using IRQ2, the IRQ receiving first priority will be IRQ3.

Thus, the first IRQ that can be associated with serial port communication assumes the highest order of precedence. However, there is an undocumented value for the "Optimize Communications" field. It will also accept the numerical value of the IRQ you wish to give precedence to. So, if my modem was on COM4, but was using IRQ5, (remember, some serial cards will let you do this!), I could put the value "5" in the field, and then the order of precedence would look like this:

dence would look like this:

IRQ	OWNER
5	COM4 (non-standard setting)
6	Floppy controller
7	LPT1
0	System Timer
1	Keyboard
2	Unused
3	COM2
4	COM1/COM3

This means that IRQ5 will receive the highest priority in being serviced by DESQview. Remember, IRQ stands for Interrupt Request, and that is exactly what happens; all other processes that can safely be



interrupted will be in order to give the CPU's attention to the program using IRQ2.

## THE TICKS THEY ARE A'CHANGIN'

Earlier, we discussed how DESQview multitasks by distributing clock ticks amongst the foreground and background applications. Why is this so important? Well, recall that there are 18.2 CPU clock ticks per second. When you first install DESQview, the default setting for the distribution of clock ticks is 9 ticks for the foreground application, and 3 ticks for "each successive" background application. We define foreground as the application, or window, you are currently working in, and all other windows that are open as background applications. It can be readily seen that if you have a number of windows open, using the default clock tick settings, that it could take more than one second for DESQview to cycle through all the windows and give them their clock ticks!

For example, let's suppose that I have a 3-line BBS running under DESQview. Each node occupies one window. The foreground node is the one that I could type in currently if I wished to. Using the default clock tick settings, this window is receiving 9 ticks, then DESQview switches to node 2, gives it 3 ticks, then switches to node 3 and gives it 3 ticks. We can see that this totals to 15 ticks, which means that after node 3 gets its ticks, DESQview goes back to node 1 and starts over, in less than one second. However, let's suppose that I then open up a text editor, a compiler and Manifest. I bring the text editor to the foreground so that I can work on something. This window is now receiving the 9 ticks, and the 5 other background windows are each receiving 3 ticks. This comes out to 24 ticks for a complete cycle, meaning that it will take more than a second to get back to my foreground window! This also means that the data in the BBS nodes has to wait until DESQview gives the window its clock ticks (which I will now refer to as "time-slice"). This is a potential problem; data could be lost or misinterpreted. Two steps can be taken to alleviate this situation.

The first involves changing the ratio

of clock ticks. Although there are no hard and fast rules for this, my own empirical observation, as well as that of other sysops, has shown that for all 386s (SX or DX), a ratio of 3 and 3 is an excellent setting to start with. My recommendation is to start with this and observe the results. If your users are not experiencing data loss or unacceptable transfer rates when uploading/downloading, I would recommend changing the setting to 2 and 2. I have found that a setting of 1 and 1 works very well on 386 machines with a CPU cache; additionally, on 486 or better machines, 1 and 1 should be an extremely safe setting to start with. These small, close ratios allow DESQview to cycle through all the applications you have, giving them each their time-slice, in less than a second.

## YOU ARE WHAT YOU UART

The second procedure should really be considered a necessity for any multi-line BBS under any multitasking environment. This involves a bit of discussion about serial ports and what they are. In actuality, the serial port existed before the PC; serial ports were used to connect "dumb" terminals to mainframe computers. The microchip used to control these serial ports was the 8-bit 8250 UART (Universal Asynchronous Receiver/Transmitter), which had a maximum transfer rate of 9600 bits per second and a 1-byte buffer for data. It was only logical that when the PC was designed, this chip was used to control the serial ports. As data transfer rates rose and modems got better, it was necessary to improve the design, and the 16450 UART was invented. The 16450 had some major advantages over the 8250: it was a 16-bit chip, which greatly increased its ability to process and translate data, and supported a maximum transfer rate of 115,000 bits per second. Currently, the 16450 is the UART used by the vast majority of hardware manufacturers. However, today's modems can transfer data much faster than the 110 to 2400 bits-per-second (BPS) modems that were common when the 16450 came out. Additionally, in our discussion of DESQview's multitasking, we can see that it is probable that given a complex enough multitasking situa-



**Caller I.D. - Computer Interface**

Units start at \$59.

Prevent unauthorized access to modem/BBS. See who is calling before answering phone! Cheap "IBM Compatible" software saves to disk.



**Digit Snatcher II**

MF / DTMF / PULSE  
Stores 1000 digits  
Units start at \$179.  
Serial Port / Microphone  
Caller ID / Portable

INTERNATIONAL MICROPOWER INC.  
65 PALM DR., CAMARILLO, CA 93010

1-800-992-3511 Orders  
1-805-482-2570 Inquires

MC / VISA

tion, such as our multi-line BBS, the one-byte data buffer afforded by the 16450 is insufficient. Fortunately, there is an answer; the 16550A UART. The 16550 is essentially the same as the 16450, except that it has a 16-byte data buffer, which provides for a much larger margin of ensuring data integrity than a one-byte buffer does. It is very important to note, though, that a program MUST be able to activate and utilize this buffer, otherwise the 16550 will perform exactly like a 16450! Your communications program or BBS program documentation will tell you whether it supports the 16550A; luckily, there are very few programs in this realm today that do not support it, and most of the ones that don't are simply earlier versions of programs whose current versions do support it.

If you are planning to run a multi-line BBS under any multitasking operating environment, I would strongly recommend that you ensure that your serial ports have the additional capacity of the 16550A UART. If you are not sure of what UARTs your serial ports are using, there are many shareware and/or commercial diagnostic programs that will identify them. One such shareware program is also an excellent diagnostic tool in general for serial communications; MODEM DOCTOR by Hank Volpe.

If your serial port or card does not

use a 16550A UART, there are a number of options. First, many serial cards are now manufactured as "high-speed" serial cards, and utilize the 16550A. Check the documentation carefully before you buy and make sure that it actually is a 16550A. Almost all multiple (more than two) serial port cards use the 16550A. Second, many serial cards or motherboards provide an additional socket for adding a second or successive serial port. These ports can be configured to use a 16550A by going to your local electronics shop and purchasing what is sometimes known as a "16550 kit". The actual designation of the chip may vary a bit; it is common for the chip to be identified as an "NS16550AFN", and it may have some or all of these extra identifying characters. The important part, however, is the 16550A designation. As long as this appears somewhere in the chip ID, it is the correct UART to use. These kits consist of three chips; the actual 16550A, and two other microchips, which are generally required to activate the second or subsequent serial port. Check the documentation for your hardware before purchase, of course.

## MULTI-PORT BOARDS

Briefly, some BBS software has the ability to "talk" to what are known, somewhat generically, as multi-port boards. The major advantage to using such a combination is that it entails almost none of the headaches that using standard serial ports does in terms of setting unique IRQs and port addresses. It also affords the opportunity to have more nodes available than the architecture of the PC would normally allow. These multi-port boards consist of an interface card which is plugged into an available expansion slot on the PC bus, which is then connected to the actual multi-port board itself. The BBS software then either talks to a proprietary driver provided with the multi-port board, or a FOSSIL driver can be used to handle the serial routing tasks. The downside to using a multi-port board is that they are often quite expensive, and some BBS software will only work with a particular brand. Before purchasing one of these, consult the manufacturer of your BBS software and ensure that

the board you are considering is compatible with the software.

As far as DESQview is concerned, the settings for the special communications parameters are generally the same as they would be for using a FOSSIL driver. If the board is configured for a particular IRQ, this is the value you would want to use in the Optimize Communications field in DESQview Setup. The individual windows can generally be set for "Uses Serial Ports=N", since the program is not actually talking to a serial port, but rather to a driver. We have tested a number of multi-port configurations, and encourage you to contact us if you have further questions about these.

## BACK TO THE SOFTWARE

As you may have surmised by now, the correct hardware configuration is just as important, if not more, as the software configuration for multi-line BBSes. There are many additional tips which I have found extremely helpful and I will go through some of them.

Before attempting to run any program inside of DESQview, it is always advisable to ensure that the program functions correctly outside of DESQview. If it does not run, make sure that the program is configured correctly first. Check for typos or incorrect path names in batch files, conflicting TSRs and/or device drivers, or possible memory conflicts.

Obviously, memory management is always a crucial issue for any PC. DESQview achieves its highest potential and performance when run in conjunction with QEMM. It is strongly recommended that if you wish to make the most of your system and wish to use DESQview, that you use it with QEMM. DESQview is sold in two forms; either by itself, or as part of DESQview-386, which combines DESQview, QEMM and Manifest. While DESQview can certainly be used with other memory managers, your performance and results will be quite disappointing in comparison to using QEMM.

When configuring DESQview windows for your BBS nodes, it is impor-

tant to consider all functions that could occur within each node. For example, if you provide the capability of running "doors", or shelling out to DOS for your callers, you will want to consider the amount of memory that will be required both by the BBS node itself and the external process. This figure should be reflected in the "Maximum Expanded Memory Size" field, which is found under Advanced Options of "Change a Program". Also, this field is important if you know that a program will attempt to "grab" all memory it sees. This field can be used either as an upper or a lower limit for the window itself.

Floppy drive access is very DMA (direct memory access) intensive, and can slow your BBS down significantly if done while users are online. In general, floppy access should be avoided while the BBS is up. There are some DESQview-aware shareware programs that will allow you to format and copy floppies, and do so intelligently, while letting DESQview give precedence (and clock ticks) to your nodes.

Communications tasks in DESQview should NEVER be allowed to be swapped out. In the Advanced Options screen, there is a field which specifies this, called "Can Be Swapped Out = (Y or N)". If you try to open a subsequent window in DESQview, and there is insufficient memory to do so, DESQview will attempt to swap the last program open out to disk. If your communications window is active and gets swapped to disk, guess what happens to your connection? It's gone! The default value for this field is blank, but I would recommend setting to N for all your communications programs.

DOS is a non-reentrant program, meaning that essentially, only one thing gets to use DOS at one particular time. Most of the time, this is not a concern at all, but there are some DOS operations that will set what is known as the "In DOS" flag until they are completed. If DESQview sees this flag, it will not let anyone else get at DOS until the previous operation completes. This can potentially cause your system to slow down drastically; sometimes, it may even appear that your system is hung. An operation that would be an



example of this is copying a file to a printer port. For this particular situation, there is an option in DESQview Setup called "Manage Printer Contention". If you set this to "Y", then DESQview will essentially intercept data which is bound for DOS, and thence the printer port, and handle sending it to the printer itself.

Many BBSs can be set up for multiple nodes by tying together a number of machines in a network. DESQview is network-aware, and provides special functionality for IPX and NETBIOS-based networks. Additionally, the new release of DESQview 2.6 provides the capacity for running DESQview on a Lantastic or Novell Netware Lite server. Currently, these are the only two types of network servers that DESQview can be operated on. DESQview will not function correctly on any other type of server, since most servers load their own operating system, and DESQview requires DOS. However, the workstations attached to the server can run DESQview, with as many nodes as can be configured per station, getting their files from the server, etc.

## PUTTING IT ALL TOGETHER

DESQview is an ideal environment for communications programs and also allows you to utilize the power of the PC without having to dedicate it to only one task. You will find that many BBS software authors routinely recommend (and in some cases, require) DESQview as the perfect solution for multi-node configurations. It does not carry the large, unwieldy overhead of a graphics-based environment, thereby providing a lean and tight interface with more resources left over for your programs. When used in conjunction with QEMM, your programs will have the most memory possible in a DOS-based operating environment. We use DESQview for our own BBS, which is a testament unto itself.

As telecommunications have assumed an ever-increasing role of importance in everyday life, DESQview has remained the sysop's operating environment of choice, and undoubtedly will continue to do so.

## RECOMMENDED READING:

Technotes available from Quarterdeck's BBS, CompuServe forum, BIX conference or via FAX:

COMMPROG.TEC  
COM&DV.TEC  
COM3&4.TEC

### Books:

"DESQview Revealed" by Dave Williams, Copyright 1992 by Sams Publishing.

"PC Telecommunications" by John Dvorak, Copyright 1991 by McGraw-Hill.

[Michael Chapman is the head of the Electronic Communications Team at Quarterdeck Office Systems. He has been involved with telecommunications for over 16 years. In what little spare time he has, he is a professional musician, and enjoys raising Arabian horses with his fiancée, Karen. Michael can be contacted via the Quarterdeck BBS: (310) 314-3227; CompuServe: 76711,655; BIX: qos.rep2; Internet: chapman@qdeck.com - Editor]

---

## LEGALLY ONLINE

---

### SHAREWARE EMERGES FROM THE UNDERGROUND

by Lance Rose

Computer shareware may be the top business innovation of this soon-concluding century. The shareware industry is not that big, but it's also pretty new, and who said major business innovations have to be explosive? Especially one as radical as shareware - try before you buy! This is no "money-back guarantee", which too many times turns into a commercial Mexican finger trap when you try to keep the seller to his word and back out of the deal. It is simply trusting the customer. The customer gets to take fully functioning software out for a free test drive, and is trusted to pay if he or she likes to use it. Shareware turns away from the ancient commercial tradition of trading my hostage product for your

hostage money, with both of us keeping our pistols trained on the other during the entire transaction. It is an early tentative stirring of a movement in our society away from "business" as a euphemism for organized greed. It's genesis is a combination of the new software distribution opportunities afforded by BBS's and networks, and the fact that we're a few years more advanced in our slow evolution upwards from needless brutality and mistrust of others.

A lot is going on in the shareware business these days. The most recent major event is the Copyright Office's issuance of final regulations for its Computer Shareware Registry. This new system of public records was created by Congress and the Copyright Office specifically for shareware and for public domain software. It does not replace normal copyright registration. If you write a piece of software and market it as shareware, you can both register the software copyright using the normal procedures, and file a separate registration reflecting your shareware licensing scheme.

Shareware registration is a way for authors and publishers to record their license terms in an official public forum. The author can include his terms on the free trial use period, whether permissions are required to sell the shareware on diskettes or CD-ROMs, bundling, site licenses, and all other matters that he wants to cover. The registry's greatest value is to bolster the copyright claims of shareware authors in the eyes of distributors, who might otherwise think they can copy and distribute shareware against the authors' wishes with impunity. Now, a federal judge faced with a federally registered shareware license will likely side with authors against the wily quick-buck distributors who argue that shareware is not really copyright-protected because it's freely available on computer networks, or because shareware authors dare to let potential customers try shareware before they buy it.

The shareware registry came about by accident. A couple of years ago, the mainstream software industry was pushing a software anti-rental bill swiftly through Congress, to combat stores that loaned software to

customers to copy illegally and then return to the store, in exchange for a supposed rental charge. A Congressional staffer had heard of shareware but did not exactly know what it was, and was concerned that this new law might somehow unwittingly squash the fledgling shareware industry. He threw together some laws quickly to save the shareware business and tacked them onto the main bill. As it turned out, the special shareware provisions were not necessary because the anti-rental bill would simply not have affected shareware at all. Shareware is not rented out, but literally given away with the hope of receiving registration fees later. Nonetheless, the staffer's hastily assembled new legal provisions were made into law as part of the anti-rental bill in December, 1990, and they directed the Copyright Office to set up an official shareware registry.

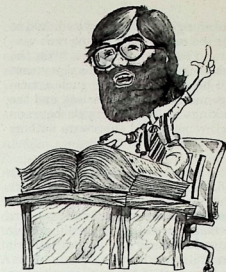
The Copyright Office issued interim shareware registry regulations in October, 1991, over a year ago, and requested public comments to assist them in preparing the final regulations. Only one organization responded, the Association of Shareware Professionals, and it made suggestions for only minor changes, most of which were accepted. The only suggestion the Copyright Office did not act on was the most important, namely creating a standard or sample form for the license document that shareware authors should file in the registry. There is clearly a need for such a form. As of a couple of months ago, the Copyright Office reported it had received exactly one license document for the shareware registry in the entire first year of its existence. If a standard form or two is developed and circulated throughout the shareware industry, we should see a fare higher registration rate in short order.

After the U.S. government saw fit to recognize shareware, Wall Street was not far behind. On May 27th, 1993 the Wall Street Journal, mouthpiece of the investment community, prominently featured an article entitled, "PC Users Can Benefit and Foster Innovation by Buying 'Shareware'." Unlike mainstream articles in the past that too often damned shareware with faint praise, this article

finally proclaimed within corporate America the same message shareware authors and publishers have been spreading for years: "Shareware isn't free unless it's specifically labelled as such (and thus becomes "freeware") and it isn't in the public domain unless its author explicitly places it there. It is also not to be confused with free "demo" versions of commercial programs, which usually are passed out in crippled form - for instance, without the ability to print or save files. . . . Paying for shareware not only is the right thing to do, it's in the self-interest of computer users. It encourages innovation and helps maintain a broad base of programming talent that can give rise to great products the big companies overlook." The article also confidently rejected the persistent myth that shareware is rife with viruses.

What more could shareware sellers ask? How about a retractions column in March 15, 1993 InfoWorld, one of the computer business' most influential rags, by its publisher Bob Metcalfe: "In my February 1 column . . . I was regrettably snide about shareware as it is today, likening it to amateur open-heart surgery. (This brought me more angry E-mail in a week than I can read in a month.)" Suitably chastened, he changed his tune: "Shareware should be of great interest to PC managers because it's a good model of how we'll all acquire software in the future - and because shareware is yet another reason for migrating to ISDN and object technology. . . . Shareware is, in essence, electronic try-before-you-buy shopping. Wouldn't everybody prefer to shop for and acquire software this way, instead of paying up front for shrink-wrapped software they're not sure they want? Yes. So that's why shareware is the future."

There is plenty of other evidence of broad corporate acceptance of shareware. Best-selling utilities packages from giant software companies like Central Point and Symantec are largely composed of shareware products acquired in bundling license deals. Some of the most successful shareware products have gone on to mainstream software success as well, such as PC File, ProComm, Automenu, Wildcat, Wolfenstein 3D, and the Wilson Windoware products.



Disk vendors that sell shareware disks by direct mail have been successful for years, the recognition of which may have culminated about a year ago when Ziff bought up one of the leading disk vendors, Public Brand Software.

Now that Corporate America realizes it's in love with shareware, is the struggle over for this new industry? Far from it; there's still plenty of growing pains. For example, new disputes have arisen over the advent of retail rack vending of shareware. Shareware is now sold in racks in every kind of variety store, book store, drug store, supermarket, etc. in this country and beyond. If you have not seen a shareware rack in your local shopping center, that little omission will doubtlessly be cured within the next year.

Many shareware authors believe shareware racks create a new perception problem that seriously reduces their registration rates. Up to now, customers got hold of shareware through BBS' or by sending away to disk vendors. They had to be fairly in touch with shareware culture even to know about shareware, and had a pretty good idea that shareware authors expected to receive registration fees, aside from whether they chose to pay. But when a K-Mart or A&P customer who never heard of shareware sees inexpensively packaged software for \$6.95, does he or she really expect that when they get it home, they'll be asked to stuff another \$25 to \$100 in an envelope and send it to Timbuktu? No, not nearly as likely. This does not mean there are no registrations, but the



rate of registration is reduced. Add to this the reluctance of some rack vendors to tell customers clearly on the disk package that additional payment will be required (since such a message may reduce disk sales), and the makings of a battle royale between rack vendors and shareware authors are all there.

Most shareware authors decided they didn't want to stop rack vendors from distributing their software, but they also did not want rack vendors to make lots of money selling their software while the authors didn't receive squat from registration fees. So they pushed for small royalties on shareware packages sold on racks, and in many cases (and after some major online shouting matches) royalties are indeed being paid. It's a minor modification of the essential shareware concept, because as anyone who's even brushed up against retail distribution arrangements knows, royalties are passed along to the customers. Now customers pay the authors a little money in advance for shareware they have not yet tried when they get the shareware from a retail rack. It dilutes the pure try-before-you-buy concept, but it's a small price to pay to bring the benefits of shareware to the general public.

A related development is what the shareware industry calls LCR, or low-cost retail software. Some companies now sell "fully-registered" shareware for prices only slightly higher than those charged at the retail shareware racks. Customers get the software with no hidden costs, albeit they will not receive nice printed manuals, extra utilities and other goodies often used by shareware authors to encourage mail-in registration. Since LCR software is also inexpensively packaged and sold on racks in retail stores at low prices, there is great potential for customer confusion between retail shareware racks and LCR racks. Adding to the confusion is the fact that shareware and LCR racks are often placed side-by-side by the retailer, and the same software package may even show up on both kinds of racks. This is a level of confusion that defies rational analysis, but we can be confident the marketplace will sort it all out in a year or two. The store owners will say "this approach works, that one

doesn't", and the rack vendors will comply nearly instantaneously.

A final, somewhat jarring note involves some recent squabbling between shareware authors and some Fidonet sysops. The sysops started selling CD-ROMs of shareware ported from their boards, without asking for permission from the shareware authors. Authors disturbed at this pointed out that their license documents included in the shareware required express permission for any CD-ROM publication. The sysops' answer? They just don't have to deal with authors' licenses or permissions. Heck, they don't even bother to read 'em! Since their BBS' are the linchpin of online shareware distribution, they somehow have a natural right to distribute shareware the shareware that lands on their BBS' any way they please, regardless of whether it's online or by CD-ROM.

This raises an interesting question about the implied license to BBS' to distribute shareware for free - how far does it go? Sysops feel the implied license attaches to them personally regardless of their activities, which can be BBS sysop one minute, CD-ROM publisher the next. Authors feel the license attaches strictly to the activity. Fairly unregulated BBS distribution is okay, but anyone who wants to distribute shareware on hard media has to talk to the author. The battle continues, though the creation of the Copyright Office shareware registry, carrying the government's implicit sponsorship of shareware licensing schemes, it's a battle the authors are likely to win.

So there's still some fireworks left in shareware. Good - It may be the most innovative business in all of creation, just don't let it become boring.

[Lance Rose is an attorney practicing high-tech, computer and intellectual property law in Montclair New Jersey, and is available on the Internet at [elrose@well.sf.ca.us](mailto:elrose@well.sf.ca.us) and on CompuServe at 72230,2044. He is also author of the book SYSLAW, a legal guide for bulletin board system operators, available from PC Information Group (800)321-8285. - Editor]

## OUT OF THE LAMP by Donn King

### GEnie changes rate structure

The big news around GEnie at press time was the rate change—highly praised in some quarters, damned in others, depending on how the change affected the quarter.

In a press release, GEnie officials said, "GEnie today [May 24] announced a new pricing structure, for the U.S. and Canada, that reduces hourly connect rates by 50%. Effective July 1, GEnie's standard hourly connect rate drops to \$3.00 per hour (\$4.00 Canadian). The monthly fee has been restructured, and moves from \$4.95 to \$8.95 (from \$5.95 to \$10.95 in Canada), which will include up to four hours of standard connect time access to most GEnie services, such as software downloads, bulletin boards, e-mail, an Internet gateway, multi-player games and chat lines. This change also eliminates the GEnie\*Basic package."

GEnie\*Basic areas had been free of connect time charges, with unlimited access between 6 p.m. and 8 a.m. local time for the basic monthly fee. They included most bulletin boards, GEnie e-mail, shopping services, the practice software library, billing and administrative information, "classic" games, some news and financial services, and miscellaneous other areas. GEnie\*Value areas were charged at \$6.00 per hour, and included almost all software libraries, computer-oriented bulletin boards, Multi-Player Games, and a number of other services. GEnie\*Professional areas involved a variety of surcharges on top of connect time, and included mostly gateways to other services such as the ARTist system (a gateway to several Dialog databases) and Dow Jones News Retrieval, but also Internet mail and FAX.

In an open letter distributed to GEnie members, GEnie General Manager John Barber said, "We have to admit that over the last few months, it's been difficult to watch the other major online companies, one after another, proclaim that their new prices make them 'the ultimate value.'"

"But rest assured, we do not intend to give up our leadership position as the best value online."

For GENie members who frequented Multi-Player Games (a highly popular area) or the computer bulletin boards, the change represents a huge savings.

On the other hand, a large number (from Barber's letter we can deduce about 15 percent) of members had primarily confined their activities to GENie\*Basic bulletin boards. For instance, two categories of the Education RoundTable are dedicated to folks involved in either home-schooling or private schooling (the categories are dominated by home-schoolers). Many had signed on GENie strictly to congregate with other homeschooleders. Although the Homeschool Cats included hundreds of members, fewer than 10 (usually only about four) ever regularly attended semimonthly Real Time Conferences charged at the hourly connect time charges. Sentiment in these categories initially ran strongly toward leaving GENie for another service.

In explaining the change, Barber said, "We concluded that more than 85% would see about the same or lower bills at the end of the month.... We found that, under the former pricing, a small number of our customers were making heavy demands on our service—demands which began to outpace our infrastructure and capacity. The result was a level of performance that pleased no one. Not you. Not us. And yet, while other companies were eliminating or reducing their flat-rate access, we were holding to ours...."

"Now, with the new rates, no one group of members is unduly favored [and] GENie can continue to stay highly competitive among online companies..."

#### Aladdin saves online time

In the wake of the announcement, hundreds of members are rushing to implement a front-end program for GENie called Aladdin. Aladdin has been around for several years and already has several loyal users.

Despite the TSR conflicts, Aladdin is

probably the best way of interfacing with GENie. Juan Jimenez, the programmer in charge of Aladdin, said, "Some TSR's don't get along with Aladdin, that is true, but the same is true of any piece of software in the market. It's impossible to make a piece of software which will work with every single TSR out there in any combination of possibilities." Aladdin documentation is very clear about potential conflicts and replete with suggestions on avoiding them.

David Kozinn, sysop of the PC Aladdin RoundTable, understandably bristles when the frequent comment about Aladdin eating hard drives crops up. Rumors float around that Aladdin destroys your hard disk by trashing your FAT table or using direct writes to disk, charges which Kozinn says are absolutely not true.

"To our knowledge, every instance of disk problems that have been attributed initially to Aladdin have been proven to be related to other problems with users' systems," he said. "For instance, there is at least one major disk cache vendor who has admitted that using their cache in write-through mode when doing a lot of disk I/O with heavy communications I/O can result in data loss. There are a number of other examples. We urge all users to read the documentation to learn what is, and what is not, compatible with Aladdin."

GENie has long been a service open to all platforms of computer; they maintain a line editor for e-mail and bulletin board postings most members consider antiquated to ensure that members may sign on via dumb hard-copy-only terminals if they wish. The GENie interface uses no fancy graphics—too many users sign on with Texas Instruments and Atari and mainframe and Macintosh computers to guarantee compatibility. Result: an interface that is not exactly user-friendly.

When you first sign on to GENie, you navigate with a system of menus and prompts. Even at 2400 baud (reportedly the most common speed for GENie members), menus can eat up precious minutes—unacceptable with the meter ticking. By entering a C at one of these prompts, you will be "upgraded" to an expert interface

consisting only of the "page" number (you can go back to menus with another C). Much faster, but very stark, and you have to know where you want to go to use this effectively (you can get a temporary menu by entering a question mark).

Aladdin remedies this for three platforms: IBM compatibles, Amiga, and Atari ST. A Macintosh front-end (not associated with Aladdin) and a Windows front-end are also under development. (Disclaimer: the following descriptions are based on Aladdin for the IBM PC, the most common Aladdin and the one with which I am familiar.)

With Aladdin you set up the RoundTables you want to visit, instruct it what actions to take within the RT (such as checking for new files or getting new messages within selected topics), and start it online. Aladdin will automatically sign you on, check the RTs, get any e-mail you have waiting, and sign off. You can read bulletin board messages and e-mail offline, write replies, and have Aladdin sign on again and upload the replies much faster than you can type.

For a number of reasons, Aladdin and GENie do not use a QWK-type packet system for messages. Still, it is tremendously faster than reading and replying online.

Aladdin also incorporates Zmodem transfer protocol for downloading files, maintains a DBase-compatible database on disk for each file library you access so you can find what you want to download offline, and provides a powerful script language for you to customize the program. Script guru Jim Lubin has created Script Main Menu, an attempt to create a menu to access all the areas of GENie that Aladdin doesn't already handle.

"READ THE DOCUMENTATION FILES THAT COME WITH ALADDIN," Juan said (his emphasis). "And read the screen during the archive unpacking and installation procedures. We put a lot of information into these files and it's important that the user read them. You can use Aladdin without the manual (obviously, we don't recommend this) but if you don't read those files, you're bound to have trouble."



"Next, scan the beginner's topics in the PC Aladdin RT. Those have a ton of information that can potentially save the user a lot of work, money and aggravation. The Staff of the RT puts a lot of work into the information available in it. It pays to read it. Literally."

Bob Tullis, one of the programmers in charge of support in the PC Aladdin RoundTable (enter keyword PCALADDIN or M110 at any major GENie prompt), said, "I'd challenge most folks NOT to be able to find an answer to their questions from messages already available in the bulletin board. Searching their topic lists to find keywords of interest, and reading the first 10 or so messages in any topic, usually will get folks the info they need concerning a particular topic's subject."

Bob also said they had a lot of closed topics (can't be replied to, but can still be read) in the bulletin board with the most frequently asked questions.

Beginner topics are Category 1, Topics 1 and 2.

David Kozinn said a lot of people don't seem to know that the help key (F1) is context-sensitive. If, for example, you have a question about the editor while you're editing, pressing F1 will probably give the answer.

#### Aladdin and the new rates

"This rate change will make PC Aladdin more valuable, as valuable as it was before GENie\*Basic was activated," Bob said. "It will get you on line and off line as quickly as possible, and let you do the time consuming work at your leisure without incurring system or telephone charges (like, when composing messages, for one example). Folks really didn't look at it with this point in mind, due to GENie\*Basic not requiring that they worry about time spent on so many of GENie's offerings."

Juan said it is very important for GENie members who can use it to get Aladdin. "It's the only official offline interface for GENie, which is designed specifically to give you the most for your money by minimizing idle time," he said.

Juan offered me a chart comparing

hypothetical usage patterns among six national commercial services and the associated charges. The absolutely lowest rate offered among the six came from Compuserve at \$2.50 a month—but that included no connect time. At 10 hours of use per month, GENie barely squeaks past AOL at the most inexpensive service, costing \$26.95. At 20 hours, however, Delphi comes out way ahead with a 20-hr. package costing \$20.00. Prodigy comes in second at \$43.75, with GENie in third place at \$56.95.

As a bonus, under the new rate system both GENie and AOL include sending and receiving Internet mail at no additional charge.

An important consideration not factored in to this comparison is the effect of Aladdin for users with one of the three platforms. Before I started using Aladdin, I averaged about two hours online with GENie per night. Now, my average time is less than 15 minutes, and that usually includes some time downloading files. I suspect if you confined yourself to reading bulletin boards and e-mail you could stay within the four hours without much difficulty (average eight minutes per day for 30 days). However, the \$3.00 per hour (nickel a minute) rate will probably encourage downloading from software libraries.

Aladdin began as shareware written by GENie member Bret Mulvey. "Not many people know who he is, and he deserves a lot of credit for being the original father of Aladdin 1.0," Juan said.

David Kozinn was among those responsible for bringing Aladdin to its current status. Bret originally received support from the sysops of the IBM PC RoundTable (which included David, Paul Homchick, and Charlie Strom, along with assistant sysop Dick Flanagan), but when the program took off the support demands became overwhelming. The sysops formed a company and bought the code from Bret, hired Juan to take care of programming, and took over responsibility for the support and maintenance.

After about a year, GENie bought the program from the company, removed all shareware restrictions, and gave

the program away free of charge except for the cost of the download (it takes about 20 minutes to download with Zmodem).

Every release since the original (current version is 1.63) has involved upgrading the inherited code. "It hasn't been easy," Juan said, "but a large percentage of the code has worked pretty solidly for the last four years. I've done a lot of changes to the code through several releases, fixing things, putting in enhancements and working to get the program to keep up with GENie's evolution over the years."

#### New version in the works

For months now the programmers have been working on a new version of Aladdin written from the ground up. Official policy forbids discussion of release dates for upgrades, and the programmers followed that policy in talking with me. Scuttlebutt around the system speculates that the rate changes may hasten the development and release of Aladdin 2.0, although the programmers point out that they are already working on it as fast as they can. Patches often divert their attention; recently the IBM PC software library reached Aladdin's maximum file number of 32767, and they produced a fix and released it within two weeks.

However, Juan was able to say, "It's been taking shape quite nicely, thanks in large part to the use of Borland's Turbo Vision library for Borland Pascal, which saved me a lot of trouble designing the actual user interface mechanics. If you have seen Borland's Quattro Pro, or Paradox, or any of the language IDE's, you already know what PC Aladdin 2.0 will look like. It's a CUA-compliant application, with mouse and keyboard support but you don't need the mouse to operate it."

#### Getting Aladdin

To get the latest version, type M110;4 at any major GENie prompt. You will receive onscreen a description of the latest version (check to make sure it's not one you already have), then offered the opportunity to download or skip the file. Press D for [D]ownload. You will be offered one of four protocols: XMODEM, XMODEM with 1K blocks, YMO-

DEM, or ZMODEM. From there, follow your regular download procedure.

You will get a self-extracting file; put it in a sub-directory by itself, run it, and read all the documentation before proceeding.

#### Bits and pieces

The Apple II Programmers and Developers RoundTable (A2Pro) publicly announced June 4 that they have been granted exclusive permission to electronically distribute all issues of Apple Assembly Line magazine. Working in association with the Lost Classics Project of the Apple II RoundTables, A2Pro will be making all text and other data published in this periodical available in electronic form in the software libraries of their RoundTable.

The out-of-print assembly language programming magazine contained both articles and source code for the Apple II series of computers. It was published monthly from October 1980 until May 1987 in print and on floppy disk by Robert Sander-Cederlof. Enter M530 or keyword A2PRO to access.

The TI and Orphans RT has recently added a large collection of cross-platform-compatible files that can be

used on IBM PC, Atari, Commodore, Amiga, TI and other computers. A large assortment of VOCs are available along with GIFs of scenic areas of interest, NASA GIFs, swimsuit GIFs, animals in nature GIFs, and a large collection of adult GIFs. Enter M575 or the keyword TI or ORPHAN at any prompt to access.

## GRAPHICS ONLINE

### DC NETWORK — DATABASE WITH A VIEW

By Jim Thompson  
Western News Service

The "image revolution" continues to shape the look of the on-line world. As NAPLPS and RIP fight it out on the graphics front, a secondary battle rages for dominance in the "photo quality" image arena.

In this, the third segment in my search for the best methods for displaying high quality images in an on-line environment, I will take a close look at DC Network (DC NET) from Durand Communications.

The DC Network package, provides all the elements necessary for the



*Jim Thompson  
and his Hat "Marlboro"*

display of text and graphics within the context of a database environment. The package includes a database design toolkit, a terminal program, which includes support for RIP graphics, and a program for compressing images for on-line display. The DC Network database is actually an enhancement of the Major Database by Galaticomm. It works only with Galaticomm's Major BBS and not with any other BBS package.

The process of displaying images to callers actually consists of sending an image that is highly compressed (and consequently transfers quickly) to the caller which is then uncompressed by the caller's terminal program.

### THE DC NET PHOTOGRAPH DATABASE

The database application of the DC package was designed from the Major BBS Database and contains a number of additional features. From the Sysops point-of-view, this is the core of the program.

I was most impressed with the improved features this portion of DC Network adds to the Galaticomm





PAGE 1: MAIN RESIDENTIAL DATABASE

Status: AVL List #: 1

LOCATION

Address: 2345 Davenport Dr City: Santa Barbara

State: 12 Zip: 93111

Images Available For Viewing

File Name	Description	Transfer Time
HOUSE1.CMP	640x480 255 color Level 3 Comp. Reduced 50%	No Wait
HOUSE1.CMP	House Color	No Wait
FRONT.CMP	Frontal View	No Wait
BACK.CMP	Back view facing house	No Wait

[ F ] View [ C ] Cancel

Main Detail

Images Print Exit

database. According to Andre Durand, CEO of Durand Communications, "We have added some 20 to 30 enhanced features to a program that was already considered one of the best available. These improvements give the user a great deal of power and flexibility in both the design and use of database functions."

Among the enhancements are the following:

- \* The ability to display multiple page output for a record.
- \* The ability to utilize up to ten filters per view instead of three.
- \* The ability to perform number range and date range searches. (Date range searches are not available in the Major Database.)
- \* The ability to search multiple keys and filters. DC NET allows for a search of 3 keys or filter comparisons strings.
- \* The ability to enter number ranges in a field for searching.
- \* The most important improvement is the ability to link both text files and images to database records.

Adding images to a database is both

straight-forward and easy. You first create a field in the database named "Images" with a field length of 800 characters. When entering a new record, or modifying an existing record, all you need to do is enter the filenames of the images (up to 12 characters each) and a description (up to 44 characters) in the "Images" field. This simple process links the image or images (you can have up to 10 images associated with each record) to the database record.

Linking text files to a record is handled in essentially the same fashion as for images.

Once the links are established, a button allowing for viewing of the image or text file will automatically appear when the caller is in the associated database area.

Another very nice feature is the ability to have a print button appear to the caller. This allows for the printing of reports and images from the database record being viewed. Image printing is funtions only if the caller is using an Hewlett Packard Series II laserjet printer.

Of course, the final out put is dependent on your adeptness at creating databases in general and in using the Major BBS and the Major Database.

The actual images that will be linked to the database and displayed to the caller, are compressed versions of original 24-bit images. Images are compressed using the DC Compress utility of DC NET.

## DC COMPRESS

The compression utility compresses files using an algorithm called DCT which is similar to Jpeg. This means that while efficient, there is loss of image quality when compressing images. Also, the file size of compressed images is dependent on the size they will be displayed. A compressed image that is to be displayed as a full screen image will have a larger file size than the same image compressed for viewing as a half-screen image.

Durand Communications provides for this by allowing for compression levels of one to five. A compression of one results in the highest quality but the lest amount of compression. A compression of five results in a high degree of compression (and therefore a smaller file size) but with less quality.

"The compression program itself is a simple command line utility which allows for the compression of almost

## COMPRESSION TIME VERSUS SIZE

Original File Size: 847,518

LEVEL	TIME	FILE SIZE
5	4 Seconds	14,091
4	4 Seconds	19,356
3	7 Seconds	34,007
2	9 Seconds	73,357
1	10 Seconds	132,660

Original File Size: 669,618

LEVEL	TIME	FILE SIZE
5	4 Seconds	8,422
4	5 Seconds	11,919
3	7 Seconds	22,053
2	9 Seconds	50,105
1	10 Seconds	95,632

any format, including .GIF, .TIF, .BMP, .TGA to our .CMP compressed format. Multiple file compression can be handled with a simple batch file," says Durand.

Although DC Compress will work with files of any size, the terminal program operates in 640x480 mode, so there is no benefit in compressing files of a larger size. This means that if you are working with high quality original image files, you will first have to transform them to a lower quality before compression. You can compress files of a smaller size but the resulting quality will be proportionally lower.

Durand communications suggest that you offer several images of varying quality for you callers. Typically, you might offer a one-quarter screen image which will result in a small file and a fast transfer time but still appear very sharp when displayed in 640x480 mode. Another file of higher quality, which means larger in size, can be offered if the caller requires a more detailed look at the image.

I found images compressed using the most amount of compression (level five) to be of a very low quality. The images are generally fuzzy with undefined jagged edges. Level four compression is better but still marginal. Level three compression was generally quite good — straight lines were well defined and the image was

PAGE 1: MAIN RESIDENTIAL DATABASE

Status: AUL List #: 1

LOCATION

Address: 2345 Davenport Dr City: Santa Barbara  
 Suite: 12 Zip: 93111  
 State: California Parcel:

STATISTIC

Sales Price: \$1,388,888 Taxes: \$3,888  
 Entry Date: 12/23/92 Company: Sunset  
 Off Date: 03/01/93 Listing Agent: Andre Durand  
 Terms: Owner Will Carry Co-Agent: None  
 School District: Goleta Phone: 885-964-4899

DESCRIPTION

FRONT: CH: Frontal Style: Spanish  
 Age: 1989  
 Fireplaces: 2

HOUSES: 2

1. Main Detail

Image Print Edit

quite clear. Both level two and level one compression resulted in excellent image quality.

One of the best aspects of the compression program is its speed. I found most images compress in anywhere between four and ten seconds.

Of course, the image quality and compression times will depend on actual image that is being compressed, but here is what my tests revealed. All compressions were per-

formed on a 386/33 PC without a math coprocessor. All original files were 640x480 in .TGA format.

## DC TERM

For the caller, the window to this magical world of on-line image viewing is the terminal or communications program. Durand Communications offers two versions of their DC Terminal program — a shareware version and a registered version. The registered version, which costs \$19.95, adds the ability for off-line viewing of images (called the slide show).

Both versions offer basic communication features including the ability to upload and download files. Both also offer full mouse support, image decompression and graphical RIP support. Currently, the terminal program (version 2.0) will recognize RIP codes sent to it by the Bulletin Board, however, RIP is not supported within the DC NET database area. "Ultimately, RIP will be supported in all areas including the database providing a seamless application," says Andre Durand.

The program is comfortable to use. It seems stable and provides a lot of functionality within its somewhat limited abilities. The support for RIP graphics works well and makes using the program a real pleasure.

PAGE 1: MAIN

CHEVY CORVETTE SPORTS CAR

VEHICLE DESCRIPTION

Style: COUPE Price: \$18,888  
 Exterior Color: RED  
 Interior Color: BLACK Year: 1988  
 Engine: V-8 350 CID 245 BHP Owner's Name: STEVE  
 Seating: 2 Phone #: 885-967-9555  
 Transmission: AUTOMATIC  
 Drive Train: RWD  
 Warranty: NONE

US 411 1000

1. Main Option Detail

Image Print Edit



## CONCLUSIONS

DC Network provides a functional approach to the many problems inherent in juggling a BBS, a database and images. The linking of images to database records is smooth as is the downloading and decompression of the images.

Remember that this is primarily a database program which allows for the display of images. It is not designed specifically as a vehicle for displaying high quality images. Full screen image quality can be very good but only at the cost of some fairly large file sizes.

For most applications, the images are more than adequate. If higher quality is required, the ability to link up to ten images to a single record allows various quality levels of the same image to be provided.

As noted, DC NET works only with the Major BBS. This is one of the best BBS packages on the market and is certainly widely used, but it is by no means the only BBS available. Right now there is a fight over dominance in the on-line image display world. For this program to be truly accepted by the BBS community, it must be adapted to work with most, if not all, main-stream BBS programs. However, if you are using the Major BBS, I can recommend this program as a practical solution to marrying images to a database.

Another limiting factor is that there is no terminal program available for the Macintosh. Apple Computer was into the world of graphics long before the PC was able to catch up and the Mac remains the dominate platform for graphic manipulation. The PC is rapidly overshadowing the Mac in the graphics world, but it is clear that Apple will always be a major player in the image game. Again, to gain wide acceptance this and other programs must admit that there are other hardware platforms and not ignore them.

I am also surprised that a Windows terminal program is not available. Although the current terminal program (DC TERM) does seem to behave properly if run under MS Windows, it does not provide the user with the "Windows" interface.

The present terminal program does work and is certainly easy to use. Still, it lacks some features that I believe are essential to any communications program including a text capture function (ability to capture incoming data to a log file) and a basic script language.

In addition to the DC Network package, Durand Communications also offers a number of turn-key database applications. These applications offer some very sophisticated programming features in packages designed for specific purposes. Not only are the programs excellent in their own right but also provide some important guidelines and ideas for the development of your own programs.

Durand Communications offers the following Turn-Key Applications:

Basic Residential Real Estate

Commercial For Sale Real Estate

Commercial For Lease Real Estate

Real Vision - This is a complete Multiple Listing Service application encompassing all three of the above modules.

Video Product Catalog

Auto Seller

Matchmaker - a dating service database

Contact Phone Book

All of the turn-key applications provide the photo viewing ability.

DC Network comes in two versions — the Lite version and the Premier version. The Lite version allows for the linking of only one image (which must be a .GIF) per database record. It does not include the compression program. The cost for the Lite version is \$395.

The Premier version allows for up to ten images per record. It includes the compression program. The cost for this version is \$995.

Both versions work with any number of incoming lines. You can run as many lines as the licensing agreement from Galacticom's Major BBS

allows. Of course to use DC Network, you must have the Major BBS and the Major Database.

(Jim Thompson is Managing Editor of Western News Service in Los Angeles, California. He also created and manages the Marlboro Racing News BBS.)

## CONTACTS:

**DURAND COMMUNICATIONS**  
5276 Hollister Avenue  
Suite 405  
Santa Barbara, California 93111  
Tel: (805)964-4899  
BBS: (805)964-2833

**GALACTICOMM, INC.**  
4101 SW 47th Avenue  
Suite 101  
Fort Lauderdale, Florida 33314  
Tel: (305)583-5990  
BBS: (305)583-7808

---

## MACINTOSH BBS NEWS

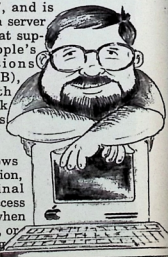
---

by Bill Gram-Reefer

## DA! LINESHARE

From Russia with love comes LineShare for Macintosh. LineShare is a Control Panel that makes it possible to share one telephone line between several fax, data, and voice communications servers. Fully Hayes compatible and supporting Fax Class 2 modems, LineShare works with System 7, and is compatible with server applications that support Apple's Communications Toolbox (CTB), and works with AppleTalk Remote Access (ARA).

LineShare allows for any application, like a terminal emulator, to access a shared line when a bbs, mail, fax, or ARA is waiting.





# *It's here... v15.0!*

To get a BBS software package any better than this, you'd have to write it yourself.

This long-awaited version of PCBoard is the most configurable, fastest and most *powerful* PCBoard ever. Features added include RIPscript graphic support, Real-Time Node Chat, File Attachment to a Message and many other long-awaited enhancements and additions.


But there's more.

With the optional new PCBoard Programming Language, or PPL, the configuration options are virtually limitless. The BASIC-like command structure of PPL allows you to write your own modifications, routines, or even applications right into PCBoard, giving your enhancements the same look and seamless feel of native PCBoard commands.

For a detailed list of PCBoard's newest additions, call our support board, Salt Air BBS at (801) 261-8976 and type WHATSNEW at the Main Command prompt or call our office at the numbers listed below.

If you can't do it with PCBoard, chances are you can't do it with anything.

Authorized Reseller  
 **ARNET**  
Multiuser Connectivity Solutions

 **PCBoard**  
Professional Bulletin Board Software  
Clark Development Company, Inc.  
For Information - (801) 261-1686  
For New Orders - 800-356-1686



for incoming calls. Its scripting language can be used to implement independent data or fax-call detection in modems; detect different kinds of data calls, so you can run a bbs and mail server while sharing the same line; and provide a remote user with a menu of available services if automatic detection is impossible. Additionally, LineShare provides a serial-port sharing and arbitration scheme that monitors a line and routes incoming calls. This line can be shared so network users can make outgoing calls using the same line. The company claims this functionality lets several "dedicated-port" applications use the same serial port without conflict and have "their" ports open and ready to receive or send at all times without really occupying the line.

Represented in the U.S. by The Global Way Company, LineShare was developed by the Moscow labs of Stalker Software, GmbH. Essentially, LineShare provides in software form, the "adaptive answering" functionality many multi-function fax/modem, and more recently, fax/modem/voice devices use. It can be used with any modem and with any types of incoming calls. When active, LineShare controls the selected port by running an appropriate script like "Supra Fax 2&TeleFinder, ZyXEL Fax&Hermes, or GVC FAX&ARA, etc. Users can write their own custom scripts using LineShare's scripting language, an extension of Apple's CCL used with ARA. While running the port, LineShare script also creates virtual "subports" for each server and registers them with the CTB, so that their names and icons appear in the port lists of CTB-compatible applications and tools. LineShare emulates a modem without connecting the server to the real device. Thus several servers can work simultaneously via its own subport.

When an incoming call is detected, LineShare detects the type of call and connects the appropriate support to the receiving device to process the call. Alternatively, when a server dials out through its subport, LineShare automatically sends commands, like initialization strings, to wakeup the device as necessary and dials the number. After connection is established, LineShare attaches the

support to the real device. When a call is complete, LineShare reattaches the line to the emulator.

LineShare can be used to replace unreliable, powered line switchers, as well as serial-port extenders that need to be manually adjusted to the desired serial device. It also provides an advantage over the above alternatives because it can handle as many devices as you want to write scripts for. Stalker, c/o P.O. Box 1631 Campbell, CA 95009-1631; (800) 262-4722 voice; (408) 370-3170 fax.

## ALOHA TABBYY

In a letter mailed to registered users of Tabby, the long-time Macintosh network mailer standard, the program's author, Michael Connick, announced that "Tabby 3.0 is effectively the last version of Tabby. In addition, Tabby 3.0 will only be sold until November 23, 1993. After that time we (ME Connick and Company) will be pulling Tabby off the market. Of course we will continue to support Tabby sysops as best we can after that date.

"Hopefully, this will encourage some of the other Mac developers out there on FidoNet to come up with new mailers that will put Tabby to shame. So if you are currently running Tabby, or have plans to do so, we strongly encourage you to obtain the upgrade before November 23, 1993.

"It's been a great experience working with all the Tabby sysops, and I regret having to make this decision, but my pressing workload gives me no other choice. Thanks to all of you for the kind words of support you've given me, and your unbelievable patience in waiting for Tabby 3.0 to finally come out. Best wishes to all of you from Kyosho and me...Michael Connick."

Version 3.0, by the way, is receiving mixed, but mostly positive reviews as users balance the many improvements, especially Tabby's new support for high-speed modems, against switching to Formula One altogether. An informal poll had one sysop ranking the two net mailers fairly equally but with a preference for Tabby. He claimed it to be more reli-

able, and that it allows previous 2,400 bps callers to continue to receive their point mail. Polling nodes outside of a network also seemed to work better. On the other hand, Formula One still has the commercial good looks and can tell you who the calling board's sysop is and what software it's running. Another sysop, though, while acknowledging the marked improvements of Tabby 3.0, leaned strongly toward Formula One, claiming good transfer rates, reliable connections, fewer errors, more complete reporting, and the ability to get onto your machine even if Formula One is already running. Tabby, we 'ardly knew ye. ME Connick and Company; P.O. Box 307 Bradley Beach, NJ 07720; 1:107:412 netmail.

## FIVE MORE UTILITIES

1. CommCloser is a program used to close a Mac's serial communications ports left open after an application has crashed. The author warns users never to close a comm port that's being used—it's not a pretty sight. CommCloser is free, but it's not shareware, you can give it to anyone but you can't charge for it. It is also Whateverware. If you like it make a donation to a charity, bake some brownies, whatever; maybe even send a postcard or check to: Russ Nelson, 2108 SW Laurel Street, Portland, OR 97201; NELSON@catlin.Bitnet; NELSON@catlin.bit-net Internet.

2. OffHook 1.1 is a small application which will send a command string to the modem and wait for a specified time before launching another application. Because the serial driver can be specified by name, OffHook can invoke RAM drivers such as those installed by Applied Engineering's QuadraLink software, as well as a wide selection of modem and printer drivers.

OffHook is intended to be used as part of a Tabby event; however, it does not support the update to the Launch.Next file. Users can specify the amount of time to wait for a new program launch. You can also change the name of the application OffHook should launch, the serial driver names, the modem strings, the name of the Next Event file, and baud rate.

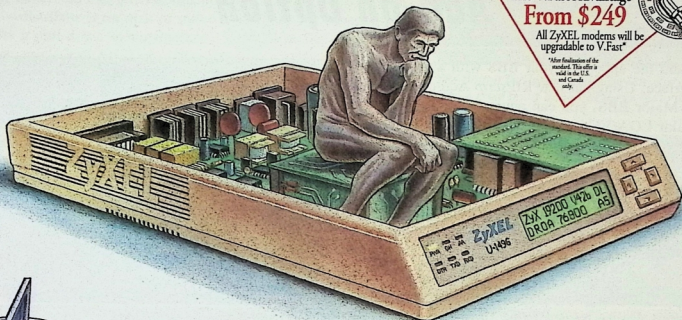
# WHY OUR INTELLIGENT MODEMS ARE A WISE INVESTMENT.

The V.Fast Advantage

**From \$249**

All ZyXEL modems will be upgradable to V.Fast\*

\*V.Fast certification of the standard. This offer is valid in the U.S. and Canada only.



With the ZyXEL U-Series modems, you're sure to save. Time. Effort. Money.

The savings begin with the U-Series' ultra-high speed—16.8Kbps data, 14.4Kbps fax (send and receive). And our new PLUS Series runs at 19.2Kbps.

But what keeps you saving are the U-Series' intelligent features—features that save you effort and ensure reliable communications.

Like *Fast Retrain* with *Auto Fall-Forward/Fall-Back*. And multi-level security features *Call-Back Security* and *Password Protection*. You can even answer calls selectively with *Caller ID*.

Want to save by having one phone line do the work of three? Get the U-Series. It adds *Digitized*

*Voice Capability with Speech Compression* to its fax and data capability. And, *Distinctive Ring* and *Auto Data/Fax/Voice Detection\** for intelligent access to all three.

And now there's a *Cellular Option* for our PLUS Series.

Everyone can save with the U-Series modems. Because they're smart enough to work in all environments including DOS\*, Windows\*, OS/2\*, Macintosh\*, NeXT\*, UNIX\*, and Amiga\*—and with async/sync systems. The U-Series modems support V.32bis/V.32, as well as industry-standard data compression and error correction protocols.

But in case you believe all this intelligence is expensive... relax.



The U-Series are the lowest-priced, high-performance modems around. And they come with Voice/FAX software and a 5-year warranty.

Which means now is the perfect time for smart people to save—by getting the ZyXEL U-Series modems.

To start your wise investment, just call today for the name of your nearest ZyXEL dealer.

**(800) 255-4101**



**ZyXEL**  
The Intelligent Modem



**The All-In-One Small Business Solution**  
ZyXEL's intelligent modem integrates data, fax and voice/digital answering capability.

4920 E. La Palma Avenue, Anaheim, CA 92807. (714) 693-0808  
BBS: (714) 693-0762 FAX: (714) 693-8811

\*Auto Data/Fax/Voice detection available on DOS\* version. Windows/Mac\* version available with Auto Fax/Voice detection. Specifications are subject to change without prior notice. All trademarks are the property of their respective owners.



# RIPscrip<sup>TM</sup>

## Add-on Option

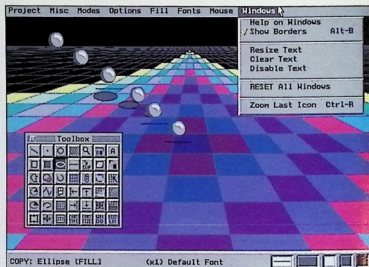
Expand the appeal of your BBS with a graphical user interface! Using our new RIPscrip Add-on Option for The Major BBS, you can amaze your users with spectacular EGA/VGA graphics that go way beyond anything you've seen on Prodigy or America Online.

You can create beautiful and intuitive screens with icons, buttons, pop-up dialog boxes, multiple fonts, and other Windows-like elements. With the click of a mouse, users can make menu selections, scan their mail, compose messages, and much more.

RIPscrip is a graphics protocol developed by TeleGrafix Communications, Inc. specifically for BBS applications. Unlike NAPLPS (the 1983 graphics standard used by Prodigy), RIPscrip is a whole new generation of online graphics technology, designed in 1992-93 with an emphasis on transmission speed, detailed hi-res graphics, and local caching of bitmaps and icons.

RIPscrip includes:

- a point-and-click BBS user interface with complete mouse support for icons, buttons, and mouse fields ("hot regions")
- simultaneous RIPscrip graphics in one window and scrolling ANSI text in another
- a full set of primitive graphical objects, such as pixels, lines, circles, boxes, polygons, bezier curves, beveled frames, and pie slices
- multiple, scalable vector and bitmapped fonts
- a sharp "button designer" with special effects (bevel, sunken, recess, chisel), multiple colors, justification of label text, and more
- zoom command and a pixel-by-pixel icon editor with masking and color replacement features
- full clipboard cut, copy, and paste commands
- color palette control, customizable fill patterns and line styles, text variables, and more



*The floating toolbox in RIPaint puts the most frequently used drawing commands just a mouse click away.*

By installing the RIPscrip Add-on Option in your BBS environment, you instantly have access to the power of the RIPaint drawing tool. It integrates smoothly with Menu Tree and the CNF configuration utility as a DLL, letting you edit graphics as easily as you would regular text. With a single keystroke, you can jump between the ANSI flavor of a message or menu and the RIPscrip version.

RIPaint is a WYSIWYG ("what you see is what you get") GUI designer implemented as a paint program. Simply lay out your screen the way you want it to appear to your users — RIPaint will take care of converting the scene to RIPscrip commands. Pull-down menus, context-sensitive help, a floating toolbox, an object editor, configurable grid snap, and other features let you quickly build professional graphics.

You can also use a stand-alone RIPaint executable to generate graphic file pages and new icons and bitmaps. And because RIPscrip is actually a collection of 7-bit ASCII text commands, you can directly tweak and manipulate the output of RIPaint with your favorite text editor.

The multi-lingual/multi-protocol architecture of Version 6.1 of The Major BBS easily supports both ANSI and RIP users online simultaneously. The RIPscript Add-on Option includes an "English/RIP" set of messages and menus to get you started. You can use these as they stand, edit them, or create your own.

The RIPscript Add-on Option also includes RIPterm, a complete graphics terminal program that interprets RIPscript commands sent by your BBS. You can provide this program free of charge to your users — distribute it on disk or make it available for download. It supports a pull-down menu interface, ZMODEM file transfers, a Doorway mode, full ANSI emulation, keystroke macros, and more.

When users call your BBS with RIPterm, your BBS can "auto-sense" RIP, and immediately begin displaying graphics to them. Or, you can prompt users to choose their language and/or presentation protocol at connect time.

One of the unique capabilities of RIPscript is support for icons and bitmapped images. Icons are stored on the user's hard drive and can be quickly displayed with a simple RIPscript command. A collection of standard icons and bitmaps are included with RIPterm, or you can design your own and let your users download them from the File Library.

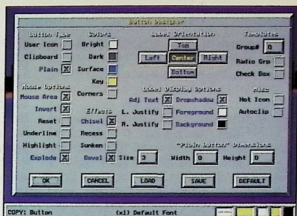
Buttons are the best way to present choices to your users, and RIPscript gives you incredible flexibility with them. You can use icons or create dynamic buttons with configurable colors, hotkeys, and special effects such as exploding buttons, 3-D sunken and recessed attributes, dropshadow labels, and variable bevel sizes.

Radio buttons, check boxes, and pop-up pick lists are also built into RIP, as well as host commands to check the time/date stamps of files on the user's end, get the mouse location and button status, query the current version of RIPterm, sound off beeps and bells, create "user variables" to store temporary information, and more.

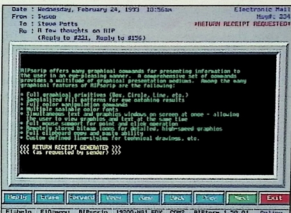
Join the graphics revolution! The RIPscript add-on includes everything you need to get started — the Sysop paint tools, a free-ware graphics terminal program (RIPterm), and a bunch of sample screens and menus to make your BBS graphical right away.

To order, see your local BBS software dealer, or call us direct at 1-800-328-1128 (international inquiries please call 305-583-5990).

The Major BBS and the Galacticom logo are trademarks of Galacticom, Inc. RIPscript, RIPPaint and RIPterm are trademarks of TeleGrafix Communications, Inc. Prodigy, America Online, and Windows are trademarks of their respective owners.



The Button Designer in RIPaint lets you quickly create crisp point-and-click menu options.



Novice users will find it easier to navigate your system with a graphical user interface.



The world is at your fingertips — and your mouse button — with RIPscript graphics for your BBS.

# GALACTICOMM

Galacticom, Inc. • 4101 SW 47th Avenue • Suite 101 • Fort Lauderdale, FL • 33314  
BBS: (305) 583-7808 • Fax: (305) 583-7846 • Voice: (305) 583-5990

Boardwatch - August 1993 57



A product of Australia, OffHook 1.1 was authored by Malcolm Davidson. He can be reached via e-mail at: mrd@mpe67.dmpc.csiro.au Internet.

3. If you call around to a number of FirstClass boards and lose track of your many and varied user names, you'll get a kick out of FC Digger, a handy utility that lets you view your user name, phone number, and password for any of the bbs settings files located on your drive or disk. Authored by Gordon Greider. Beerware...if you like it have a beer! You should be able to find FC Digger on any OneNet board.

4. ReachOut is an application/extension that gives you added control of other Macs on your network. This utility by Chris Silverberg provides two methods for hard, restart/shutdowns. The nice method works by instructing the Finder on the local machine to restart or shutdown the computer. But, if an open application requires user action before it can close, then you go to Plan B. Plan B, the not-so-nice method, will do the deed whether or not the user is required to save or click "OK." Free.

5. Shoelace is a Tabby-compatible program that can update your BBS software and launch a specified program locally or remotely. Also a creation of Chris Silverberg, Shoelace was written by Chris as a way to solve his own sysop dilemmas. He writes, "While WMUG BBS runs at home, I live on campus miles away from my house. Since we are running TeleFinder, I can make any changes that I desire, except for one; I can't update the BBS software because it's already running. Well, no more.

"Our BBS software is called "Node Server". If I upload a file called 'Node Server.update', the next time an event is run Shoelace will delete the current 'Node Server' and replace it with the newer version that I just uploaded. After that, the new software is launched with the end of the event.

"Another problem I've had in the past is a case where, for whatever reason, one of my event utilities failed to launch the next program successfully. This happens only rarely, but the result is one line of our BBS doesn't answer the phone.

There wasn't a simple way to get the BBS software running again. So I added a feature to Shoelace. If Shoelace finds a text file called Launch Me', Shoelace will read the first line of the file and attempt to launch that program. This can be a partial or full pathname to any program. Using this method, if my nightly event fails to complete, I upload a file with the pathname to the BBS software for the failed phone line. Then I initiate a crash-mail session and presto, both lines running again."

Also free. You can reach young Silverberg at: 60 Bryn Mawr Avenue, Auburn, MA 01501; 1:322/115.1 FidoNet; TfChris AOL; macman @wpi.wpi.edu Internet.

Finally, in case you lost contact with the Celestin Company, they of the reliable and affordably priced high-speed modem cables for the Mac, you can catch up with them at their new digs in the great, rainy Northwest: Celestin Company; 1152 Hastings Avenue, Port Townsend, WA 98368; (800) 835-5514 toll-free; (206) 385-3767 main voice number; (206) 385-3586 fax; Celestin AOL; 71630,650 CIS; PCELESTIN Delphi; PCELESTIN GENie; pcelestin National Videotext Network; celestin WELL; celestin@netcom.com Internet.

## MAC INTERNET STUFF

There are ways to request files on the Internet using just mail. For that you could possibly use Eudora. But if you want to actually become a small, internal FTP site for your organization, or have branch-davidian delusions of becoming the next Info-Mac archive to rival Sumex-Stanford, then check out FTP'd, v2.0.1, a recently upgraded shareware contribution from Peter Lewis.

FTP'd is compatible with most gopher-like clients like TurboGopher, Fetch or XferIt, allowing your Mac to act as an FTP server, so you, business associates on an AppleTalk network, or anyone on the Internet can access and transfer files from owner-designated volumes—if you want to let them, of course. FTP'd requires System 7 and File Sharing turned on with appropriate privileges assigned. Other require-

ments include MacTCP 1.1, 128K Roms or later. You can set up your own "owner" accounts for administrative access, "user" accounts with names and passwords that are setup in the users and groups settings, and "guest" settings. Designated volumes include shared, local folders; mounted volumes from other servers; any servers in your own zone, and far servers for any shared volumes in other zones. Privilege settings can be set to none, read only, upload, and full.

After you've set all of the parameters and made sure all necessary passwords are in a secure place, simply throw an alias of FTP'd into the system folder and launch. FTP'd will run in the foreground or in the background. It only can send text files or those converted to ISO 8859-1 or 7-bit ASCII before being sent. BinHex and MacBinary files are converted on the fly. A lot of special features are available including stats, long or short file names, searching, extensive directory listings, remote help, and a log file for the administrator. You can enable Gopher in FTP'd and guest access via AppleShare through the preferences window.

A reminder, disable guest logins unless you absolutely need them to prevent the compound from being burnt to the ground. And keep those passwords safe and secure. "Cause if you don't, anyone on the Internet that knows your user name and can guess your password (you didn't use your birthday, did you?) can login and delete every file on your hard disk. If in doubt, don't run it."

Shareware fee is \$10. A site license is available for \$1,000. U.S. or Australian site license for universities are available, too. Peter does not promise support, but he always answers his e-mail, he says. Peter Lewis, 10 Earlston Way, Booragoon, WA, 6154 Australia; peter @cujo.curtin.edu.au Internet.

ToadNews v1.0 lets users running a UUCP package to be a "leaf-node" Usenet site; a leaf-node does not relay news to other nodes, except back to the node that is the source of the news, or the "newsfeed." ToadNews takes newsbatches sent from the newsfeed, unbatches them, and puts them into an appropriate

directory for retrieval using a news-reader or text editor.

ToadNews handles compression and decompression and automatically determines what type of batch it is, currently supporting R#, newsS, R#, and straight compressed. There are many automated features as well. For instance, it saves the text with header info in Mac text-editor format; a configurable timer will remove old news; while an active list editor helps you control the flow of news from active newsgroups.

ToadNews can run as a background process under System 7 where it will quietly unbatch and expire news unnoticed. And, being fully System 7 aware, it understands basic AppleEvents including Open Application, Open Document, Quit Application, in addition to drag and drop files, balloon help, and aliases. ToadNews currently supports use with a UUCP engine like UUCP 3.0, and a newsreader like rnMac. Maybe, by the time you read this, it will also work with Gnuucp and TheNews. Shareware \$25; from: John P. Mah, Toilets R Us Software; 201 Riviera Drive, Thunder Bay, Ontario, Canada P7B6H8; jpmah@descartes.uwaterloo.ca Internet.

The Boston Computer Society reports that it has started a special interest group to cover the Internet. For more information contact: Michael Barrow, Boston Computer Society; (617) 252-0600 voice; (617) 577-9365 fax; bcs-isig-request@mit.edu Internet; FTP to: isig.mit.edu

A fine collection of Internet applications can be found on Planet BMUG—my hands down vote for best BBS of the year. Gathered by Bernard Aboba, author of the soon to be released second edition of BBS and Beyond, you can find the 4-disk collection in the telecommunications area of the file library. Disk One contains mostly TCP/IP tools for people with SLIP/PPP type accounts. There you'll find Eudora for mail, and the graphical Fetch for file transfers. Disk Two includes the Mac-interfaced implementation of Gopher, Nuntius for net news, and the NCSA/BYU version of Telnet. Disk Three includes Homer, a program that supports Internet chat, and

Gopher Server. Finally, Disk Four includes MacArchie, MacTalk, MacFinger, FTP server, NewsWatcher, World Wide Web (a global hypertext program that lets you browse the Internet in Hypertext), the Internet Business Pages, MPing (a reportedly buggy but useful ping tool), MacPPP, and MacMUDDWELLER for playing in the virtual reality games.

If you're a member of BMUG, you can download these files from Planet BMUG, operated by Berkeley Macintosh Users Group, or order the diskettes for delivery by regular mail. BMUG 1442-A Walnut Street; #62, Berkeley, CA 94709; (510) 549-2684 voice and registration.

## MAC BBS OF THE MONTH

It was a pleasure to run into MauiLink, based in Hawaii. Keola Donaghy, the sysop, works in the Hawaiian language immersion program and is attempting to establish a hub on the statewide service, Hawaii FYI, as a BBS using the Hawaiian language and alphabet characters.

Keola describes some of the activities of the immersion program: "We have a statewide preschool program called Punana Leo. There is on Punana Leo on each major island with the exception of Oahu, which has two. This program is for children from 3 to 5 years old, and all of the instruction is done completely in Hawaiian; nothing is translated; from day one the children hear nothing but Hawaiian.

"There is also an elementary school program that is part of the state Department of Education called Kula Kaiapuni. Here, children from Kindergarten through the sixth grade are all taught standard DOE curriculum, but in Hawaiian only. We have permission to take this program through the 12th grade.

"This program does not produce Hawaiian-only speakers, for the children are completely bilingual because of the predominance of English in their lives outside of school. The children begin their formal English classes in 7th grade, but all other instruction is conducted in Hawaiian. About 600 children are involved in the program statewide."

The thrust of the system is to get all of the children online via the Macintosh labs each school has. That way all of the students could speak to each other via mail, in conferences, and via real-time chat to hone their Hawaiian language skills. "The potential for other services involving high schools, the university, and the adult education program are staggering," notes Donaghy. Very much in the planning stages, FYI, which provides NAPLPS terminals and expertise, has already committed to providing a machine, software and expertise to get the network up and running, while the other support organizations are working on getting the screens translated into Hawaiian. Most of the pieces should be in place by fall semester.

MauiLink is an important part of the setup. Keola, himself, is a student of the Hawaiian language at Maui Community College, working part time at the Punana Leo on Maui. He also works with the support organizations for Punana Leo and Kula Kaiapuni throughout the state, providing Macintosh support. These groups are actively involved in converting shareware and commercial software into Hawaiian, translating menus, dialog boxes, everything, into Hawaii's native language.

Originally, a Hermes board, MauiLink slowly migrated to a customized version of Zterm that included support for Hawaiian characters. Then, after meeting with Apple Librarian, Steve Cisler, Keola began customizing FirstClass with graphics, sounds and Hawaiian characters including a bit-mapped Hawaiian font complete with all of the diacritical marks.

MauiLink contains a variety of files and conferences. There are sections for New Files, Apple and DOS/Windows software, and the AMUG CD. MauiLink also offers a support section, Classifieds, and Gateway conferences from Slice of the Apple (NY) and several OneNet conferences including MIDI and Ask Apple. Within the Apple file section you'll find support for Power Book, HyperCard, Power Tools, Games, Applications, Utilities, Telecom, System Utilities, and Fonts.

The conference areas include a



MacNerds Anonymous section for hard-core dweebs and hacks. Conferences also include News, Help and a section for Maui Software, a publisher of business forms software. Support for Hawaiian language and local conferences is the main draw, though, with a Town Hall conference, and sections on native writings, language, music, chants and songs, and Hawaiian literature.

Operating on Classic and one 2400-bps phone line, MauiLink employs a customized FirstClass host that includes the Hawaiian fonts. The customized FC Client I used included these modified fonts which enable callers to see the diacritical markings in conference names and messages that use Hawaiian. If you use a regular FC Client you will not see the names and messages correctly, so download the custom settings first or maybe Keola can post it on OneNet so you don't have to phone the Pacific. Keola also plans to add more custom sounds as well. Only two custom icons for now, more to follow.

Finally, MauiLink still needs to find a way to link up with the FYI program through an X.25 gateway. Keola writes: "I am desperate to locate someone who has done FC on an X.25 network. We would love to do a FC Server completely in Hawaiian for the children of our immersion program. The means to do this is through Hawai'i FYI, an X.25 gateway is needed. If any of your readers could help I would be grateful."

In my opinion, one inequity stemming from computer technology in our self-styled and unregulated market-driven data and telecommunications economies is that such capital-intensive innovation threatens to leave those cultures and interests behind that can't "buy into" the new knowledge infrastructure being created by a quasi-public Internet, and corporate giants like Dow Jones, Time-Warner, Microsoft, and others. While government initiatives and corporate largess sometimes helps, many native, parochial, and otherwise worthwhile yet powerless communities will be obliterated by, what Merton described as, the "technological fury" of the coming 21st century.

But MauiLink, Hawaii FYI, and the

state-supported native culture immersion program has already demonstrated much courage, vision and expertise. So please, help Keola and MauiLink deal with some of the final, niggling technical questions if you can. You can reach Keola Donaghy via CompuServe 76114,1230, or at at MauiLink, 261-A Naniloa Drive, Wailuku, HI 96793; (808) 877-6028 bbs.

## ATTENTION MAC SYSOPS

Aloha! If you have a Macintosh-based BBS—even if it's in plain English with no QuickTime clips of hula girls swaying across the logon screen—let us know who you are and what you think you're doing that makes your board jiggle. To make things easy, mail a diskette containing your user program with a preset account, time allotment and password to the address below so I can log on and take a look around your system. Also include a text-file that describes your board and any interesting places on it you think are special. I'll try to visit as many boards as possible and write about the most interesting ones I can find. MAC BBS, 2069 Highland Drive, Concord, CA 94520.

Bill Gram-Reefer, based in Concord, CA, is president of WORLDVIEW,

specializing in connectivity and communications. E-mail Bill at: wk05156@worldlink.com - Editor

## INTERNET NEWS

by Jack Rickard

### DEMOS - NOT AT ALL WHAT YOU THINK

We recently received some information about something termed "DEMOS" that are really quite new in the U.S. They have NOTHING to do with demo or crippled versions of software products. And they have been pretty big in Europe apparently. And we found them quite captivating, not only for what they are, but how they come to be.

Demos are the data version of Music Videos. Also known as "intros" these are short graphic animations set to music. They are almost exclusively done by young hacker types who form "groups" very much patterned after musical groups. Often, group members are spread across a continent, and usually are international. Each group member does part of the coding to create a little music video.

## UNI-ROM

Your CD-ROM Source

### NightOwl's 8.0 In Stock!

Nightowl 8.0	\$42	Erotic Encounters	\$49
Nightowl 7.0	\$29	Giffy Gold	\$29
Nightowl 8.0 & 7.0	\$62	Busty Babes	\$49
Shareware Tiger	\$39	Seedy Rom 7th Heaven	\$39
America's Premier	\$29	GBL (gay - bi)	\$39
Gigabyte Gold	\$39	Ecstasy Hot Pics	\$49
Phoenix 3.0	\$25	PC-Pix 3	\$39
So Much Shareware 2	\$29	My Private Col. 2	\$49

Adult CDs - MUST be 18+ Over 21

Say you saw us in BOARDWATCH and purchase any 3 CD's listed above and get a 4th CD listed above FREE!



Order On-Line!

COD



VOICE (619) 279-1139  
BBS (619) 279-4774 USR Dual  
FAX (619) 561-4253

5694 Mission Center #449  
San Diego, CA 92108 USA

The resulting files are quite largish - often on the order of a megabyte. They have no purpose other than as a work of art. I suppose you could say they "demonstrate" video monitor hardware, soundcards, and the usefulness of the multimedia concept, but that really doesn't seem to be the heart of it. It is an artform made up of viciously aggressive program code, swooping and colorful geometric shapes, and music. Given the very impressive improvement of video games, with their introductions that include really nice graphic screens and music, it is related to game software development, but seems to focus on the pure art without the game. Often they run for five or six minutes, and we found them enormously entertaining. Devoid of much of a message other than a tout for the group and maybe a list of group members at the beginning or end, they are eye and ear candy for the PC.

Dan Wright of Plantation Florida has taken it on as a mission to bring demos to the U.S. Apparently demos were pretty big for the Commodore computers anyway, but are beginning to appear for MSDOS machines. Wright has helped to establish three ftp sites for archiving demos - ftp.uwp.edu, wasp.eng.ufl.edu, and ftp.sun.ac.za. Each site has the identical directory /pub/msdos/demos which currently holds about 120 of these programs - ranging in size from 17KB up to over a megabyte in LZH compressed format.

According to Wright, the "best" demos currently available include Amnesia, Crystal Dream, Delusion, Facts of Life, Panic, TechnoHolic, and Unreal. Apparently, a new Crystal Dream 2 release is imminent and rumored to be the "greatest demo ever released." So we popped the Crystal Dream demo to have a look. The program was over a megabyte compressed, and we were suitably impressed. A fairly plain CRYSTAL DREAM appeared on screen, melted into some striking colors, and the show started.

The sound from the internal speaker on our PC was not impressive. We could make out the music about well enough to know that it was and that we needed a SoundBlaster card pretty badly. The README file had

warned us about this, and we were a bit aware of it anyway. But the screen graphics were quite stunning, a brief blaze of fractal colors gave way to an outer space scene, with spaceships, and various polygons and geometric shapes flying about in pretty grand profusion, changing colors, morphing into other shapes, etc. A checkerboard surface appeared, and objects floated and moved over it with corresponding shadow work beneath. A helicopter shadow appeared, followed by the helicopter itself lowering into view.

Demos are created by groups with names like Triton or Toxic Zombies. They have gatherings of sorts in Europe at such things as the TCC gathering in Sweden or the ASSEMBLY '93 gathering in Helsinki. They are in the process of creating a BBS network called the Creative Demo Network or CDN to distribute demos.

Wright himself is a member of the Toxic Zombies, made up of eight programmers age 19-27 with two from Europe and six from the U.S. This excerpt from their "album cover?"

Yes, WE are the Toxic Zombies of the demo world. Doing what other groups do but with an added "toxic" twist. Formed late in 1992 our group consists of eight members. Our formation was brought about via the internet system when various people responded to a text file I placed on the "demo site." Pascal and Krister come from abroad (Europe) while the rest of our members reside in the U.S. of A. We are male and female students ranging in age from 19 to 27. Distance, school, graduation, and in some cases jobs hinder our progress yet nonetheless we continue. Survival is a Zombies basic instinct - WE shall survive. So, we anticipate you will still be around for our future productions but till then enjoy this "undead" Toxic Zombies production. Take it black, Dan Wright/Palbearer.

Sounds like internationally cooperative programming groups producing cult art with a following - entirely based on computer graphics/music. New to me. For further information, contact Dan Wright, 1320 NW 76th Ave., Plantation, FL 33322; Internet - [dmw@sioux.ee.ufl.edu](mailto:dmw@sioux.ee.ufl.edu).

## PCB-UUCP VERSION 1.1 RELEASED

Merlin Systems of Ottawa Ontario has announced the June 30 release of Version 1.1 of PCB-UUCP an Internet/USENET gateway for PCBoard BBS software.

PCB-UUCP allows PCBoard bulletin board systems to connect to the Internet via UUCP dialup accounts to exchange Internet e-mail and Usenet News Groups - allowing their callers to send and receive Internet messages to any Internet account in the world.

The new release includes full support for the new PCBoard Version 15.0 message formats. PCBoard recently announced version 15.0 and one of the new features was an expansion of the TO and FROM fields to 125 characters from the previous 25 - greatly improving the ability to address messages to the Internet domain name system.

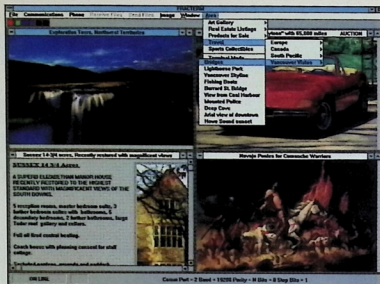
The new PCB-UUCP also includes utilities to port Usenet Newsgroups from the PageSat satellite system described in our June issue. PageSat transmits the full Usenet Newsgroup feed of nearly 5000 message conferences by satellite, avoiding costly telephone connect charges.

The new version upgrades the ability to attach files to messages with automatic uuencoding/decoding of file attachments to allow the files to be transported across the Internet in ascii text form. Multi-part attachments can now be accommodated. It intelligently translates foreign codepage characters to ASCII-7 characters accommodating foreign terminal alphabets. Inbound and outbound aliasing has been added and a new feature to produce return "bounce" messages on inbound messages to unknown users.

Author Roy Pereira has been working with Sparky Herring, author of the offline mail reader 1st Reader to get the two packages to work together. Where PCB-UUCP splits long messages into multi-message parts, for example, 1st Reader will put them back together. Additionally, the LISTSERV function has been upgraded and the whole program



## PHOTOS WITH TEXT UNDER 10 SECONDS!



FRACTERM provides an online catalog or publication in real time. Ideal for real estate, people, travel, boats, autos, magazines—anything that needs a photo. Fractal image files can be just 5K-10K! FRACTERM is available in DOS or Windows versions, and includes a terminal program (free to you users), image compression, menu building, and database utilities. Easily adds photo menus to any DOS BBS software with no disruption to established menus.

Demo: (604) 687-1030 BBS Internet: imagen.bc.ca  
Imagen Inc. 504-1168 Hamilton St. Vancouver B.C. V6B 2S2

**IMAGEN, INC.**

(604) 266-2240

now requires less memory and runs faster than the previous release. Merlin Systems, Inc., PO Box 3043, Station C, Ottawa, Ontario K1Y 4J3 Canada; (613)236-1138 voice; (613)236-1481 BBS/FAX; Internet: info@merlin-systems.on.ca.

### INTERNET SOCIETY ELECTION RESULTS ANNOUNCED

The Internet Society (ISOC) completed its first election of new trustees on June 1, 1993 adding six trustees to the existing thirteen. Newly-elected to the ISOC Board of Trustees are:

Scott Bradner, Consultant, Harvard University Office of Information Systems.

Susan Estrada, Consultant, President of the Commercial Internet Exchange (CIX) and a founder of the California Education and Research Federation Network (CERFnet).

David Farber, Professor of Computer

and Information Science and Director, Distributed Systems Laboratory, University of Pennsylvania

Harushisa Ishida, Professor, University of Tokyo and Head of Research and Development, Computer Center

Jean Armour Polly, Manager of Network Development and User Training, NYSERNet.

Jonathan Postel, Associate Director for Networking of the High Performance Computing and Communication Division of the Information Sciences Institute of the University of Southern California.

They join the current trustees in guiding the Internet Society's growth and direction.

The Internet Society is a scientific and educational professional membership organization devoted to promoting the evolution and use of the Internet and its technology on a world-wide basis. Founded in 1992, ISOC provides the organizational

framework for the development of Internet Standards through the Internet Architecture Board and the Internet Engineering Task Force. The Internet is a system of nearly 12,000 interlinked computer networks containing over 1.7 million host computers in all sectors of the economy (government, academia, education and industry) in over 100 countries. The system has been doubling in size annually for the last several years.

"The new trustees are representative of the vigorous, creative and rapidly growing Internet community. Their involvement in the ISOC Board of Trustees will enhance its perspectives and increase its already considerable energy levels," said Vinton Cerf, President of the Internet Society.

The new trustees will meet face to face with their colleagues on the Board at the 1993 annual conference of the Internet Society, INET93, August 17-20 in San Francisco. Internet Society, 1895 Preston White Drive, Suite 100, Reston, VA 22091; (703)648-9888 voice; (703)620-0913 fax; Internet: isoc@isoc.org

### BIX ANNOUNCES FULL ACCESS TO THE INTERNET

The Byte Information Exchange (BIX) has travelled an interesting road as an online service. Originally part of McGraw-Hill's BYTE Magazine, it was sold to General Videotext a year ago. The service has always attracted a core user group of technical people, but not a lot of the consumer market.

The service has recently been playing to their strong hand, with posters and so forth noting "No Hair Styling Tips," a play on the alt.anything approach taken by most of the larger consumer services.

In June, the service announced Full Access to the Internet allowing callers to use ftp and telnet functions to browse the global Internet quite freely, in addition to the basic electronic mail functions. And both BIX, and their sister service, Delphi, have decided to enhance this Internet access in every way possible.

Dealing with the Internet can be like drinking from a firehose. Without some guidance, callers might wade through millions of pages of text to find what they're looking for. To help solve this problem, BIX has integrated Internet access into each of its Exchanges, with topics that contain messages describing related information on the Internet and how to get it. In this way, BIX callers can find needed information and have an area to post messages about their Internet travels. BIX will act as an Internet tour guide.

Basically, they are also enlisting the aid of their 200 Exchange moderators to be tour guides as well, and encouraging them all to get familiar with the Internet, and stand ready to answer questions and help callers out with finding the good stuff on the net. We're not sure such a level of assistance is available anywhere else on the Internet at all. This human tour guide "value added" component, coupled with actually placing Internet materials and connections into individual Exchanges, makes BIX and Delphi the first commercial service we've seen to add Internet connectivity without simply throwing it on the system and hoping nobody used it much until management could figure out if it was a cow or a camel.

Internet access is provided as part of the standard BIX membership. BIX users can use telnet to log on to remote services, ftp to transfer files from a remote archive, or use finger, whois, and other tools as well. Usenet newsgroups and gopher will be added in the near future. There are no surcharges or transfer limits imposed by BIX on these services.

Joining one of the most popular recent trends among the commercial services, BIX is releasing a Windows terminal program for the service. Titled BIXNav, this terminal program provides grunt/click access to many features of the service. The program is adequate to the task, and the BIX crowd, largely technical aficionados, won't likely have any difficulty installing the program. We found installation unusually cryptic for a Windows application, with no built in lists of telephone numbers, and some things setup during initial configuration that we just couldn't

find a way to change later, even by starting over with the initial configuration setup program. The full bevy of technical detritus from 15 years of modem history is displayed in panels featuring skads of options that are probably unnecessary in this type of program. Once installed, like most of this genre of Windows access program, it was pretty, and did speed the process of dialing and navigating the service. The program is actually pretty preliminary and an upgraded version is due in September.

BIX's pricing has also proven popular. The basic deal is \$13 per month plus connect charges of \$3 per hour. But they also offer a 20/20 plan that provides 20 hours of evening/week-end access for \$20 per month that has been very well received. And they do offer a special trial membership of 5 hours access for \$5. Users can sign up for this special offer and take a month to explore the service with no obligation. To join, dial by modem (800)695-4882 or telnet to x25.bix.com. At the login prompt, enter bix, and at the Name? prompt, type bix.internet. You can also reach the service by voice at (800)695-4775. For individual callers looking for "full internet access," this 20/20 plan is hard to beat. General Videotext now claims a user base of 100,000 between BIX and Delphi. BIX, 1030 Massachusetts Ave., Cambridge, MA 02138.

---

## SCHOOLS ONLINE

---

by Bill Gram-Reefer

### E-MAIL LESSONS IN DIPLOMACY

"The telecommunications program at Atascadero Junior High School (AJHS) is relatively small, but we generate a large amount of information," noted Sheldon Smith, one of the school's teachers.

The foundation of telecommunications at AJHS is KidsCafe, which is a program based in Norway, but has a North American listserv in North Dakota. Each morning Smith downloads an index of letters sent to the KidsCafe listserv. "I look at the subject line of the index and look for let-

ters addressed to my students, or letters addressed 'to anyone.' Smith allows the students to drop whatever they are doing in class to allow them to type a reply on any one of the two Macintosh computers in the classroom. Any missed schoolwork while they are typing must be made up by the next day.

"KidsCafe enables my students to write to other students scattered around the globe. My students have corresponded with South Africans, Italians, Thai, British, Canadians, Hondurans, Norwegians, and Swedish on a daily basis. KidsCafe is ongoing in my English class."

Sheldon also instigates many other telecom activities for his students. One such project was "A day in the life," where students from 15 schools from around the world made detailed hourly records of what they did on one day, January 14th. The results were e-mailed to all of the participating schools; each school receiving about 130 messages. With these responses students could compare the day in their own lives with the lives of students on the other side of the world. The project helped the kids learn that kids are kids everywhere.

According to Smith, "other projects were our electronic holiday-card posting on Cleveland Freenet, and sending poems to schools and bulletin boards. I also have students write letters to authorities and figure heads requesting information for their research papers."

"Telecommunications is rarely an event in my classroom; it is an ongoing program that students utilize to give them a purpose for writing," Smith explained. For a while, the only reason some students arrived in class was to see if they received a letter from another country. "Junior high students love to write notes. I use telecommunications in my classroom to dignify their note writing and also to model real-time communication for information gathering. With only a dial-up access, we squeeze a lot out of the Internet."

To illustrate, after the U.S. Navy shot a Turkish vessel during a NATO exercise, Smith's students felt that the U.S. should apologize for the



accident. So the kids began writing notes of apology which were compiled into a class letter. Smith sent their letter to the Turkish newsgroup on UseNet and also forwarded it to his sister who moderates a Middle Eastern conference on PeaceNet. After posting their class letter the Smiths received about 30 replies over a two week period. Here's a sample of the class letter and some of the responses they got back:

"October 9, 1992, To all of the people in Turkey, These notes are from 5th and 6th grade students in San Luis Obispo, California. We recently found out that a U.S. Navy ship shot one of your Turkish ships and killed 4 people. We decided that an apology was in order, so this is our way of saying we're sorry. Any replies or comments can be forwarded to shsmi@eis.calstate.edu. The students would love to hear any replies or comments from the people of Turkey."

"Hi, my name is Mark Cook. I'm sorry a U.S. ship shot a Turkish and killed 4 people. I apologize for it all."

"Hi my name is Jason Kennedy. I am ten and was born on November 10, 1981. As an American I am very sorry for what we did to your ship and men, and I hope you know it was an accident and we're trying to protect you."

"Hello, my name is Mandy Evenson. I don't like to hear about killing even if they are accidents so I feel sorry for you and your men that were killed. People get killed every day but not like this and as an American I think that America should repay you in some way for the lives that were taken. I know that their families are having a hard time because I have family missing and it is hard to get over especially for them because they were killed and didn't get to live their full life. I just think that they should tell every one in Turkey and in America."

"Hi my name is David Jackson I am 11 years old. I am very sorry about us destroying your ship. I am very sad that the Americans did that to you."

"Hi my name is Brian Cook. I am 11 years old. I am sorry that we

destroyed your ship."

"Hi my name is Ricky Pucci and I am 12 years old. I am really sorry for the accident that the US has made by shooting down your ship and killing your men, I am very mad that the US isn't doing anything about it, and hope somehow we can repay you."

Turkish replies: "Following is an open letter of profound appreciation to the faculty and the students of San Luis Obispo, California, from Mr. Edward Tashji.

"Our letter is sent to the students of the 5th and 6th grades in the school of San Luis Obispo, and is directed to their attention in the name of the entire Turkish American community throughout the United States.

"Dear students and teachers; Dear boys and girls; My dear brothers and sisters, At the conclusion of this letter there will appear one signature, but the content of this letter to each of you represents the deep personal feelings of our entire community. I have the unenviable task of trying to give voice to hundreds of thousands of people who extend to you the warm embrace of brotherly and sisterly affection.

"We sincerely hope our correspondence will be photocopied and placed into the hands of each student named above. The names are taken from a letter received by the electronic mail system in our office, and if I inadvertently have omitted any student names please accept my apology. Our expressions of gratitude are prompted by your magnificent letter, dated October 9, 1992 in which the students have expressed their sorrow for the accidental firing of two missiles by the American Carrier Saratoga, which hit a Turkish destroyer killing five Turkish sailors and officers and injuring another 14 naval personnel. The tragedy occurred during a NATO exercise in the Aegean Sea on October 2, 1992.

"There is truly no way in which we could reveal to you wonderful boys and girls just how deeply your comments have affected our people. No poet could say it more beautifully; no composer could create such a magnificent symphony! How then could I hope to touch the heart of each of

you in such a way that you can comprehend the emotion and gratitude of the Turkish people? Your feelings of deep sorrow is evident in your every word, and you do not realize the comfort your comments have brought to the entire Turkish Nation, and to the Turkish-American community as well.

"One student wrote: '... I wish we could give you a gift ...', but you HAVE! Dear child of our hearts, you have given to the families of the lost young man and the country they proudly served, the gift of your loving heart! Another wrote: '... I wish I could do something ...', but you HAVE!

"Dear child of our hearts, you and the other young ladies and gentlemen, have extended your compassion and you have touched the very soul of a God-fearing nation. Your parents and your teachers must be very proud of your gesture, they deserve to be congratulated for their affect upon your character. Yes indeed, sometimes we hurt our friends and we become as you have written, 'very sad'. So it happens between friendly nations and the grief we as Americans feel was expressed by President George Bush in his letter of condolence to the president of Turkey. Your kind understanding is our consolation. Dear boys and girls, you might find it interesting to know that the undersigned is an American born whose parents were born and lived in Turkey many years ago; they emigrated to our country at the end of the First World War. My wife and I are born of Armenian and Syrian-Orthodox parents, and our history of brotherhood with the Turkish people goes back over six centuries.

"Among the many facts that (probably) none of you knew about the land of Turkey, is: 1. The home of the Blessed Virgin Mary still stands in Efes, (Ephesus), Turkey. 2. Santa Claus was born, lived and died in Turkey! That is a historical fact. The Cathedral of Saint Nicholas is found in what is called Demre, Turkey. It was built centuries ago at the site of his birth. 3. For centuries, people of the Christian, Jewish and Moslem Faiths have lived together in peace and harmony, as they do this very day. It is an honor for me to be in the service of the people I love, and since your comforting words have affected

the Turkish people, they have also touched me very deeply.

"In conclusion, dear students -my dear brothers and sisters- I would like to say that we sincerely wish that we will receive a response from you so that we may know you have learned from our appreciation and gratitude. As we reiterate our thankful sentiments to each of you, and with our best wishes for your continued happiness and success, I offer each of you a beautiful Turkish expression which is said to very close friends and those we love: We kiss your eyes! With the admiration of our federation, signed

Edward Tashji -Director, Public Affairs Committee."

"To: San Lois 5th and 6th grades students, Hi, our names are Turan and Aslan. We are from Turkey. We got your messages by e-mail. We became very happy for sharing your feelings with us. As students, you all are your country's future. Being aware of these kinds of events gives us happiness. That is, we human beings all together can establish a peaceful world without any nuclear power. In short, your behavior was excellent and appreciated by all Turkish people. With our best wishes, Selahattin in Turan and Ismail Aslan, Turkey."

To find out more about how Sheldon Smith is using 21st century tools to teach 21st century concepts, you can contact him at Atascadero Junior High School, 6501 Lewis Avenue, Atascadero, California 93422 USA; (805) 466-2417 voice; shsmitt@eis.calstate.edu Internet

## ATTENTION EDUCATORS

The focus of this column is to report on BBS and network applications at work in schools from K-12 and in graduate-level universities. Help educators and students get wired! Let us know how your educational institution is putting BBS technology and networks into action. Please let us know about specific, innovative applications you use, or your school's involvement in corporately-sponsored programs. I'll report on the most interesting resources, issues and programs you send to:

SCHOOLS ONLINE c/o 2069 Highland Drive, Concord, CA 94520.

Bill Gram-Reefer, based in Concord, CA, is president of WORLDVIEW, specializing in connectivity and communications. E-mail Bill at: wk05156@worldlink.com

---

## DIRECT DIAL

---

### PSYCHO BULLETIN BOARDS

by Julia Wilkinson  
julia@aol.com

There's an alternative to lying on the proverbial leather psychiatrist's couch. Now you can dial the couch directly: More and more adults are getting their help conveniently and anonymously through BBS's.

Two BBS's in particular focus on mental health and psychological issues, the "ShrinkTank" BBS in San Jose, CA (408-257-8131), and "Dr. Shrink's Couch," based in Florida (407-294-2864).

### SHRINKTANK

San Jose, California  
(408)257-8131

Writes ShrinkTank sysop Dr. Rob Bischoff, "I am attempting to have the SHRINKTANK become the West Coast gathering point for professionals in mental health; that is, a networking point to share information, referrals, case discussion psychological product reviews, and many other topics of clinical and research interest." The BBS's welcome message explains the system is dedicated to the sharing of ideas and information with special emphasis in the areas of mental health and psychology.

The ShrinkTank boasts a robust topic selection from its main bulletin menu, including "Sigmund Freud: A History"; Unique BBS's (by area code); Schizophrenia Explained; Mental Health Organizations; a Recommended Psych Reading List; "Psych Testing Catalogue List"; a Christian BBS Listing; "Alzheimer's Disease - A Discussion"; information on Depression; Clinical Program Files List; Professional Conferences

List; Attentional Deficit Disorder; Psychiatric Malpractice; and a list of A.A. Meetings in Santa Clara County.

As a new user, you are given access to the notice areas, but not download access to files nor professional and student conferences. To obtain this access, you need to leave a message to the sysop and be prepared to supply your curriculum vitae.

Therapists and those simply interested in finding out more about psychology will find a bibliography listing further resources under "Books and Journals." The list was compiled by Ivan K. Goldberg, M.D., who is a sysop of Psycmnet, a National Network for Mental Health professionals. The list includes the title and publisher of books covering topics such as Biology and Human Behavior, Examination and Assessment of the Patient, Neurotic Disorders, Alcohol and Other Drug Dependence, Psychosexual Disorders, Psychopharmacology and Thanatology (the study of death and the medical, psychological and social problems associated with dying).

For those of you confused about the difference between a psychiatrist, a psychologist, a psychotherapist, and a psycho, there is a helpful file on the BBS inspired by ShrinkTank user Kathy Kelley, who wanted the descriptions of fields clearly differentiated.

A listing of offline conferences around the nation is available in "The Mental Health Conference Exchange." Some conferences listed when I dialed included a Multiple Personality Conference in Chicago, Addictions seminars at the University of Bridgeport in Connecticut, and a Harvard Medical School conference about Geriatric Psychiatry.

### DR. SHRINK'S COUCH (407)294-2864

Dr. Shrink's Couch is comprised of the sections: Message Forum, Bulletin Area, PsychInfo, Statistics and Graffiti.

Among the more interesting pieces on Dr. Shrink's couch is Dr. Robert



Johnstone's "Conflict Resolution." It includes instructions on self-hypnosis, which produces alpha brain waves. Johnstone notes there are many books today instructing people to think "positive," but that this doesn't always work for all people. With self-hypnosis, he writes, "the positive thoughts have approximately 100 times the effect." He suggests offsetting the hundreds of negative thoughts we have each day by practicing self-hypnosis 10 to 30 minutes per day.

A file many considering psychotherapy will find helpful is *A Guide to Selecting a Psychotherapist*, in which the non-musical question, "Psychotherapy: Resource or Retreat?" is asked by author David L. Johns, MS Ed. LMHC (I don't know what it stands for either, but I imagine it involved a lot of time in a classroom). In it Johns explains that most people who use psychotherapy are "ordinary people" who want to be better and improve their lives in a number of areas, be they work, play or relationships.

"Psychotherapy is not a crutch," writes Johns. "It is hard work and is only effective with your deliberate effort and motivation." Therapists are trained to give you an in-depth (and, importantly, objective) assessment of your problem, and guide you with techniques to change your behavior and feelings the way you want.

Noting that therapists vary in their ability to treat certain types of problems, he emphasizes that it's important to select a therapist with their ability to relate to you in mind.

Both systems list other BBS's that specialize in health, psychology, or support groups, for further exploration.

## THE INTERNATIONAL FIDONET - 22067 BULLETIN BOARDS WITH AN ATTITUDE

by Jack Rickard and Gary Funk

One of the strongest elements of the BBS phenomenon is the urge to mate. The sex online story is really quite accurate, but it applies more to

the BBS machines themselves than to any prurient interest of the people accessing them. Bulletin boards seek to "connect" electronically in the night.

Tom Jennings developed a BBS software package titled Fido in the early months of 1983. But Jennings had heard descriptions of computer "networks" linking computers using expensive telephone lines and hundreds of thousands of dollars in hardware. Starting from a minimalist approach, he contemplated the puzzle of how to do the same thing for bulletin boards - for cheap.

The early version of Fido BBS, released sometime in June of '84, didn't really do much by today's standards. It had no routing or cost accounting, no control on how many times it would call a node, no error handling or log files, and could not do a file attach or request. It could create an e-mail message packet, place the call, and transfer the packet. But by using existing modems, the public switched telephone network, and reduced long distance rates available in the wee hours of the morning, it did "connect" bulletin boards.

Within two months, the number of "nodes" using this software to exchange mail had grown to almost 30, and according to Jennings (Fido #1), the net was becoming clogged. Fido was not very smart when calling a system to send mail. At that time, there were six nodes in St Louis, and if Fido #1 wanted to send a message to each of those nodes, it had to make six long distant calls to six systems that were all within local calling distance of each other. It was obvious only one call should be needed. Coordination had become difficult and it sometimes took days to repair the slightest problem, such as a modem not answering or having a wrong number in the nodelist.

To get a node number was simple. You left a message on Fido #1 that you were ready and you wanted a node number. Jennings would put you in the list with your phone number and the other nodes would call and download the list. In September '84, the number of nodes climbed to over 50, and the net started to deteriorate. Each week there was at least

one wrong phone number. Jennings would sit up at night and watch his system call some poor old lady every two minutes at 4:00 AM.

At the same time, Jennings was changing the Fido software almost daily and losing some of the new node requests. With all the work Jennings was doing, he started assigning nodes by voice, which got him into more trouble. It became obvious that there had to be a more rational way to assign node numbers. The group in St. Louis, including Ben Baker, Ken Kaplan, and others, volunteered to take over the node list and handle the new node requests.

By February 1985 they had the error rate down to almost zero and the total nodes in FidoNet to over 160.

In 1986, Jeff Rush was trying to organize a pizza party for FidoNet BBS operators in the Dallas/Ft. Worth area. He devised a method for "echoing" an entire message area on his BBS to the other BBSs in his local net using netmail. Any message entered into that particular area on any BBS in the network, would appear in that same message area on ALL BBSs carrying that conference. The pizza party was a modest success. Echomail somewhat more so. By the time the next FidoNet Convention was held, in Colorado Springs that year, Jeff Rush asked the assembled sysops how many of them ran his echomail utilities - to try to see if the thing had caught on at all in other local nets across the country. He was stunned to see virtually every hand in the room go up.

Echomail was the gasoline on the FidoNet fire. Today, virtually all Fidonet systems join the network to gain access to echomail. Many conferences enjoy thousands of participating BBS and any one Fidonet BBS may carry 50, 100, or more of the 600 topical echomail conferences online.

The reason echomail caught on so solidly was that it solved a basic problem for bulletin boards. If a BBS had a single message "conference" where anyone could post a message and everyone could read it, the conference could be VERY confusing to read if there were several different "discussions" or "threads" going on

at the same time. To make this rational, BBS operators set up a series of conferences where discussions on programming would be in one conference, political discussions on another, and so forth - by topic. The problem with this was, that once a system attained enough different conferences to topically handle all the discussions the callers wanted, there were only a couple of callers active in each conference.

Echomail linked topical conferences, with other bulletin boards. If a conference, for example, was shared among 200 bulletin boards, and on each BBS there were only 2 callers interested in that particular topic, the conference still had a mass of over 400 people discussing cooking, art, politics, or whatever the conference was devoted to. Echomail allowed bulletin boards to regain the critical mass needed for an active conference, while still allowing and even encouraging the rationalization of e-mail conferences.

FidoNet membership is defined by entry into the "nodelist" published each electronically each Friday. As of June 18th, 1993 the nodelist contained 24,819 entries. Because of the way the nodelist is formatted to display various echomail hubs, network coordinators, etc., there is a redundancy factor, but that nodelist still contains some 22,067 UNIQUE entries, spread across six global zones including North America, Latin America, Europe, Africa, Asia, and Oceania. All but a scant handful of operators today run BBS software, OTHER than the original Fido BBS, that has gained the function of "FidoNet Compatibility". Not only are individual messages and files routed from one system to another, but hundreds of shared store and forward discussion areas, termed Echomail, are passed among thou-

sands of individual BBS across the globe. It is quite ordinary, today, to enter a question in a cooking echomail conference on your local BBS in Albuquerque, and dial back in to the system a few days later to find a reply from someone in Italy - who dialed into a local BBS in Rome.

Tom Jennings has received numerous awards for his development of FidoNet, including the Andrew J. Fleugleman Award, the Electronic Frontier Foundation's Pioneer Award, and the John C. Dvorak Award for Technical Excellence in PC Telecommunications.

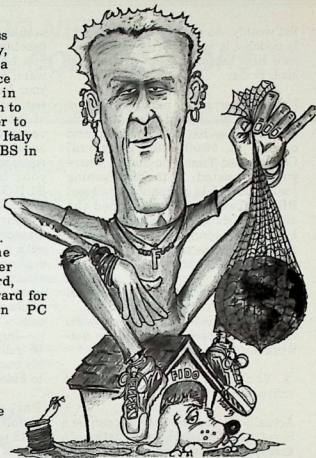
To get from a handful of system operators in San Francisco, St. Louis, and Indiana to over 22,000 systems worldwide today, there were some delicate areas to iron out. But the system remains remarkably simple and effective today.

The three basic elements of FidoNet are the nodelist, the FidoNet Technical Standards Committee specification for communicating within FidoNet (FTSC-001), and national mail hour.

The network is organized into six geographic zones - each with a zone coordinator, originally an appointed position. The six world zones are shown in the accompanying table. It is interesting to note the growth in FidoNet membership in each of these zones from our analysis last year of the July 31, 1992 nodelist, to the June 18th, 1993 nodelist we look at in this issue.

Worldwide, the International

FidoNet grew 41% in less than 11 months with some areas like Latin America showing as much as 80% growth. North America grew by exactly a third in eleven months.



Each

zone is further subdivided into geographic "regions" - each with a Region Coordinator or RC. There are currently 67 such regions worldwide. Within each region are both networks and independent "nodes". A node in FidoNet is the individual BBS. Local networks are groups of BBS that share telephone expenses to the "outside" - meaning other FidoNet connections a long distance call away. Local networks are administered by a Network Coordinator or NC and currently the average number of nodes in a network within FidoNet is slightly over 36 nodes.

The nodelist is the heart of the system. Published each Friday, it contains a complete telephone directory listing every BBS participating in FidoNet. Each FidoNet BBS receives the updated nodelist and mailer software uses this directory to automatically dial and connect with other systems in the network. As each local network adds systems, the information flows upward from the local network to the region and finally to the zone coordinator who publishes a new updated list each week. Systems not responding during national mail hour are likewise deleted from the

## FIDONET NODE DISTRIBUTION

ZONE	7/31/92	6/18/93	GROWTH
1. North America	9500	12641	33%
2. Europe	4420	7068	59%
3. Oceania	693	939	35%
4. America Latina	165	298	80%
5. Africa	78	95	21%
6. Asia	793	1026	29%
<b>Total</b>	<b>15649</b>	<b>22067</b>	<b>41%</b>



list weekly. As such, FidoNet's weekly nodelist is arguably the most accurate BBS list in the world - updated each Friday.

FidoNet started out passing mail at a common time during the night. This was known as national mail hour and occurs at 0900-1000 Universal Coordinated Time - no matter where you are located. In the intervening years, most Fido compatible mail and BBS software have developed the ability to do mail sessions on a 24 hour basis - but the only absolute requirement is that you be up for national mail hour.

As a result, there are only two real requirements to join FidoNet.

1. You must run FTSC-001 software capable of interfacing with the network for mail sessions.

2. You must have that software active during national mail hour.

Actually joining the network can be a bit of a chicken and egg situation. In theory, you must send a netmail message, using functioning installed FidoNet compatible software, to the local area network coordinator NC for your area, or to your local Regional Coordinator (RC) if you are not close to a local network. They then provide you with a nodelist, and make an update entry into the nodelist for your system. The following week, your system should appear in the FidoNet nodelist and you are part of the network.

Of course, you first have to find the local network coordinator or region coordinator. FidoNet is entirely a volunteer organization and no one receives a salary. There are no national headquarters, offices, or PR firms representing the network. You have to find the local NC yourself.

We've attempted to make this easier by publishing in the accompanying table a complete list of 684 network coordinators worldwide. The list is sorted by telephone number, so prospective FidoNet members can look up the one closest to their geographic location. Using this print format, had we chosen to print the entire 22067 systems - it would require 368 Boardwatch pages - pass.

Installing the necessary software to

actually perform the FidoNet mail function is a bit of a challenge. Once you have installed your mail software, and sent an e-mail message to your local NC, he should respond by sending you a nodelist and a package of information about local net conventions. Once you are in the nodelist, and have your mail software running perfectly (right), you can ask your NC who serves as the local ECHOMAIL COORDINATOR. Normally this will be another sysop in your local net. The echomail coordinator should be able to supply you with a list of all available echomail conferences and explain how you can receive the conferences you desire to carry on your system. These shared "Echomail" conferences allow your callers to enter into flame wars and p—ing contests with other likeminded individuals world wide and probably constitutes the biggest advantage to FidoNet membership.

Part of our fascination with the FidoNet nodelist is as a marker to BBS populations worldwide. In a survey of six cities performed last year, we determined that on average, 23.73% of the public dialup bulletin boards in the North America were in the International FidoNet and listed in the FidoNet nodelist. We repeated this survey this year, and found that taking three entirely different cities, we came up with an average of 23.79%. Having done this each year with different cities for some time, we've come to view this 24% figure to be virtually sacrosanct and to hold true over time. Certainly in the early days, FidoNet "penetration" was on the grow, but over the last four or five years, it has remained remarkably steady.

Why is this important? Well, it tells us with alarming accuracy that if this percentage holds true world wide (it probably doesn't), there is a population of some 92,757 bulletin boards in operation as public dial up systems that would welcome a call from a stranger. With exactly 12,623 unique nodes listed in North America, where we know this ratio holds true, this would strongly indicate a total of 53,060 publicly operating bulletin board systems on the North American continent. Over half (57.2%) of the BBS in the world operate in North America.

## MAILER SOFTWARE

SEAdog Version 4.61 - \$125  
SEAmail Version 1.3 - \$195  
System Enhancement Assoc. Inc.  
PO Box 949  
Nassawadox, VA 23413  
(804)442-5865 voice  
(804)442-5867 SEABoard BBS

BinkleyTerm Version 2.56  
Free for non-commercial use  
Bit Bucket Software, Co.  
PO Box 460398  
Aurora, CO 80046  
(303)693-4317 BBS 1:104/501

Intermail - \$99  
Interzone Software  
9050 Pines Blvd, Suite 430  
Pembroke Pines FL 33024  
(305)436-1587 voice  
(305)436-1884 Interzone Cafe  
BBS 1:1/133

The Integrated Mail System  
(TIMS) for TBBS - \$149  
eSoft, Inc.  
15200 E. Girard Ave, Suite 3000  
Aurora, CO 80014  
(303)699-6565 voice  
(303)699-8222 eSoft Support BBS

Front Door 2.20 - \$179  
Online Communications  
22 State Street  
Bangor ME 04401  
(207)941-1110 voice  
(207)990-3511 BBS 1:132/300

Fido Software  
PO Box 77731  
San Francisco, CA 94107

WILDMAIL v 3.01  
(Fido for Wildcat) \$65  
Online Computer Resources  
2036 Columbus Parkway # 405  
Benicia, CA 94510  
(707)552-1122 voice  
(707)552-0602 BBS - 1:161/123

Despite political squabbles, technology changes, and growing pains, FidoNet has gone from a single BBS to over 22,000 systems in slightly over nine years. Many use it for a variety of purposes. It continues to grow in anarchic fashion through a process we term "defying all reason through better software." While some operators take their FidoNet VERY seriously, most of the old hands in the network realize FidoNet really has only one purpose - it's fun.

# INTERNATIONAL FIDO NETWORK

## LIST OF ZONE AND REGIONAL COORDINATORS

NET/NODE	NETWORK	DATA PHONE	COORDINATOR	LOCATION
----------	---------	------------	-------------	----------

### ZONE 1 - NORTH AMERICA

1:1/0	North America .....	604-589-8562.....	Bob Satti.....	Surrey BC
1:10/0	Calif Nevada .....	714-838-6539 .....	David Garrett.....	Tustin CA
1:11/0	Central United States .....	614-481-0355 .....	Mark Lynch.....	IL IN KY MI OH WI
1:12/0	Eastern Canada .....	613-723-5711 .....	Fred Ennis .....	ON PQ NB PE NS NF
1:13/0	Mid Atlantic .....	703-323-7654 .....	Bill Andrus .....	DC DE MD NJ NY PA VA WV
1:14/0	Mid West .....	417-673-2283 .....	Tim Pearson .....	IA KS MN MO NE ND SD
1:15/0	REGION15 COORDINATOR .....	602-894-8762 .....	Marv Carson .....	AZ CO NM UT WY
1:16/0	New England .....	203-791-8532 .....	D Dawson .....	CT ME MA NH RI VT
1:17/0	North West .....	604-266-1977 .....	Dallas Hinton .....	AB AK BC ID MB MT OR
				NWT SK WA YT
1:18/0	S.E.U.S./Caribbean/Bermuda .....	407-383-1372 .....	Christopher Baker .....	AL FL GA MS NC SC TN PR
1:19/0	TX AR OK LA .....	713-496-6319 .....	B Davis .....	Houston TX

### ZONE 2 - EUROPE

2:2/0	Europe etc .....	358-0-2983308 .....	Ron Dwight.....	Finland
2:20/0	Sweden .....	46-8-57154478 .....	Thomas Sundblom .....	S
2:21/0	Norway .....	47-22221084 .....	Ola Garstad .....	N
2:22/0	Finland .....	358-0-8881562 .....	Ari Backholm .....	FIN
2:23/0	Denmark .....	45-32-961764 .....	Kim Loeqvist .....	DK
2:24/0	Germany .....	49-2381-460077 .....	Erich Janssen .....	GER
2:25/0	United Kingdom .....	44-424-853361 .....	Peter Burnett .....	UK
2:26/0	Ireland Temporary RC .....	353-402-35308 .....	Diane Duane .....	IE
2:27/0	Luxembourg .....	352-42-0201 .....	Luc Engelmann .....	L
2:28/0	Holland .....	31-75-217873 .....	Jan Vermeulen .....	NL
2:29/0	Belgium .....	32-3-6851123 .....	Staf Weyts .....	B
2:30/0	Switzerland .....	41-64-230319 .....	Roland Gautschi .....	Aarau
2:31/0	Austria .....	43-1-8154873 .....	Werner Illsinger .....	A
2:32/0	France .....	33-75676164 .....	Philippe Feuerstein .....	F
2:33/0	Italy .....	39-10-3770080 .....	Ermanno Iencinella .....	I
2:34/0	Spain .....	34-3-2193452 .....	Efraim Bayarri .....	Barcelona
2:35/0	Bulgaria .....	359-52-259108 .....	Daniel Kalchev .....	BG
2:36/0	Portugal .....	351-1-8520478 .....	Jorge Rebelo .....	P
2:37/0	Hungary .....	36-56-422-189 .....	Erno Petro .....	HUNGARY
2:38/0	AdriaNet .....	38-66-34986 .....	Gregor Rudolf .....	SLO HR
2:39/0	Iceland .....	354-2-14626 .....	Jon Fannar Karlsson .....	Iceland
2:40/0	Israel .....	972-9-914-618 .....	Ido Ophir .....	IL
2:41/0	Greece .....	30-31-237763 .....	Basilis Tspas .....	Thessaloniki GR
2:42/0	Czech Republic & Slovak Republic .....	42-184-3893 .....	Jaromir Zachata .....	CR SR
2:43/0	Turkiye TR .....	90-1-2655079 .....	Tolga Yurderi .....	TR
2:44/0	Georgia .....	7-8832-293581 .....	Valeri Imnaishvili .....	GR
2:45/0	Belarus .....	7-0172-706000 .....	Sergey Sotnikov .....	Minsk
2:46/0	Ukraine and Moldova .....	7-0572-274788 .....	Timur Tsyganko .....	Kharkov Ukraine
2:47/0	Lithuania .....	370-7-209547 .....	Zygmantas Cepaitis .....	LT
2:479/0	Latvia .....	371-2-223986 .....	Egons Bush .....	Riga Latvia
2:48/0	Poland .....	48-22-410374 .....	Jan Stozek .....	PL
2:49/0	Estonia .....	372-2-433023 .....	Madis Kaal .....	Tallinn Estonia
2:50/0	Russia .....	7-095-329-2192 .....	Pete Kvitek .....	Moscow Russia



# INTERNATIONAL FIDO NETWORK

## LIST OF ZONE AND REGIONAL COORDINATORS

NET/NODE	NETWORK	DATA PHONE	COORDINATOR	LOCATION
----------	---------	------------	-------------	----------

### ZONE 3 - OCEANIA

3:3/0	Oceania .....	61-2-428-4687 ..	Trev Roydhouse ....	Trans-Tasman
3:50/0	VICTORIA & TASMANIA AUSTRALIA .....	61-3-792-3507 .....	david nugent .....	MELBOURNE AUSTRALIA
3:51/0	Central Australia .....	61-8-380-5505 .....	Darryl Merritt .....	Inglewood SA
3:54/0	ACT NSW PNG QLD Australia .....	61-7-269-6355 .....	Alwyn Smith .....	Sandgate Qld
3:55/0	WEST AND NORTH AUSTRALIA .....	61-9-257-1309 .....	Colin Wheat .....	Perth WA
3:57/0	NEW ZEALAND .....	64-3-383-1155 .....	Tony Hall .....	Christchurch NZ

### ZONE 4 - AMERICA LATINA

4:4/0	America Latina .....	52-3-621-9932 ....	Gamey Garcia .....	Latin America
4:80/0	Rede Brazil .....	55-71-244-8764 .....	Mauricio Andrade .....	Brazil
4:85/0	Red Banda Oriental .....	598-2-486616 .....	Juan Carlos Alonso .....	Uruguay
4:88/0	FidoNet-Chile .....	56-2-279-6767 .....	Pedro Aguilera .....	Chile
4:90/0	Fidonet-Argentina .....	54-1-544-6241 .....	Federico Joselevich .....	Argentina
4:92/0	Red Panama .....	507-23-9669 .....	Michael Chamberlain .....	Panama City Panama
4:97/0	FidoNet Mexico .....	52-83-56-4119 .....	Arturo Garza .....	Mexico

### ZONE 5 - AFRICA

5:5/0	AFRICA .....	27-41-342859 ...	Henk Wolsink .....	Port Elizabeth RSA
5:70/0	BOTSWANA .....	267-373461 .....	John Case .....	Gaborone
5:71/0	SOUTH AFRICA .....	27-171-84102 .....	Niel Uys .....	Welkom
5:72/0	ZIMBABWE .....	263-4-738692 .....	Rob Borland .....	Harare
5:73/0	KENYA .....	254-2-567043 .....	Doug Rigby .....	Nairobi
5:75/0	ETHIOPIA .....	251-1-514412 .....	Lishan Adam .....	Addis Ababa
5:76/0	ZAMBIA .....	260-1-252892 .....	Mark Bennett .....	Lusaka
5:77/0	FRENCH-WEST-AFRICA .....	221-21-7627 .....	Moussa Fall .....	Dakar Senegal
5:79/0	FRENCH-EAST-AFRICA .....	216-1-70-1827 .....	Michael Cracknell .....	Tunis Tunisia

### ZONE 6 - ASIA

6:6/0	ASIA .....	886-2-322-5113 .....	Honlin Lue .....	Taipei TAIWAN
6:60/0	ASEAN Region .....	65-2410418 .....	Wing Lee .....	SINGAPORE
6:61/0	HONG KONG AND MACAU .....	852-789-1267 .....	Samson Luk .....	Kowloon HK
6:62/0	TAIWAN NET .....	886-6-275-3162 .....	K-c Lin .....	Tainan TAIWAN
6:63/0	FidoNet-Japan .....	81-427-77-0847 .....	Bill English .....	Sagamihara Japan
6:64/0	PHILIPPINES .....	63-2-712-0329 .....	Carlos Legaspi .....	Quezon City Philippines
6:66/0	FidoNet Korea .....	82-2-824-6228 .....	John R. Temple .....	Seoul Korea

# INTERNATIONAL FIDO NETWORK

## LIST OF LOCAL NETWORK COORDINATORS

NET/NODE	NETWORK	DATA PHONE	COORDINATOR	LOCATION
<b>ZONE 1 - NORTH AMERICA</b>				
1:2604/0	North Jersey Somewhere .....	201-573-9262	Robert Hessler .....	Riverville NJ
1:2606/0	New Jersey Fidonet 2606 .....	201-948-3428	Mike Brandt .....	NorthWest NJ
1:142/0	Heart of CT .....	203-224-4206	Jerry Schwartz .....	Hartford Area
1:320/0	NET320 Coordinator .....	203-295-8384	Joseph Turner .....	Marlborough CT
1:327/0	EASTCONN-NET .....	203-564-8579	Lawrence Kolada .....	Plainfield CT
1:141/0	ConnCentral .....	203-663-1147	Steve Sekula .....	Killingworth CT
1:348/0	Manitoba Net .....	204-338-3423	Chuck Collins .....	Winnipeg MB
1:3657/0	North East Alabama Net .....	205-238-4327	Philip Rockholz .....	Anniston AL
1:375/0	Central Alabama Net .....	205-279-7313	Tom Jones .....	Montgomery AL
1:3606/0	TideNet .....	205-507-0384	Stanley Smith .....	University AL
1:3625/0	Gulf Coast Net .....	205-666-0932	Richard Wallen .....	Mobile AL
1:3607/0	North Alabama Net .....	205-773-2859	Jim Reese .....	Hartselle AL
1:3602/0	BhamNet .....	205-854-4814	Marlin Johnson .....	Birmingham AL
1:373/0	Rocket City Net .....	205-880-7723	John Emmert .....	Huntsville AL
1:343/0	Lesser Seattle Opera .....	206-355-1295	Dave Ball .....	Seattle WA
1:352/0	OlyNet 352 .....	206-456-6073	Rick Castle .....	Olympia WA
1:3408/0	Gray's HarborNet .....	206-532-9142	Kenneth Hartman .....	Aberdeen WA
1:3403/0	Long-Kel Net .....	206-578-1157	Kay Akagi .....	Longview WA
1:350/0	Kitsap Peninsula Gateway .....	206-698-1044	Jim Barth .....	Silverdale WA
1:3401/0	NW Washington State .....	206-757-1139	David Hennessey .....	Burlington WA
1:138/0	TacoNet .....	206-840-2445	Dave Reed .....	Tacoma WA
1:326/0	MAINE NET .....	207-363-6584	Wayne Price .....	York ME
1:328/0	Eastern Maine Net .....	207-945-9346	Mark Goodwin .....	Bangor ME
1:347/0	CNW NET The Last Frontier .....	208-375-2049	Bill Parrott .....	Boise Id
1:205/0	Fresno/Central Valley .....	209-434-4215	Sam Wecter .....	Fresno CA
1:208/0	Stockton/Modesto Net .....	209-551-2258	Stephen Edgar .....	Modesto CA
1:214/0	San Joaquin Valley Net .....	209-627-5572	Roger Smith .....	Visalia CA
1:217/0	Madera Valley Net .....	209-675-3218	Dennis Conner .....	Madera CA
1:397/0	Mid/Upper Valley Net .....	210-383-1994	Alton Moore .....	Edinburg TX
1:3820/0	Lower RGValley Net .....	210-546-4812	Chris Rowan .....	Brownsville TX
1:387/0	San Antonio .....	210-654-9792	Doug Palmer .....	San Antonio TX
1:102/0	SoCalNet .....	213-874-9484	Richard Martz .....	Los Angeles CA
1:124/0	WC 124 .....	214-669-9645	Iain Brown .....	Richardson TX
1:2614/0	Philly's Burbs .....	215-491-0919	Thomas Lynch .....	Philadelphia Suburbs PA
1:273/0	Philadelphia Metro .....	215-725-9134	Michael Walsh .....	Philadelphia PA
1:2607/0	Bethlehem/Easton/Allentown/Reading Net .....	215-861-0544	David Savlin .....	BEAR PA
1:157/0	Northeast OH .....	216-273-1340	Bob Abbott .....	Cleveland OH
1:244/0	Mid-OHIO Net .....	216-345-5807	Rudolf Rothmund .....	Wooster OH
1:237/0	State Line OH/PA .....	216-544-4022	Orren Zook .....	Niles OH
1:233/0	Chambana Net .....	217-384-4311	Wayne Hamilton .....	Urbana IL
1:246/0	Danville Net .....	217-431-4999	Lonnie Courson .....	Danville IL
1:2430/0	LincolnLand Net .....	217-787-9101	David Bloomberg .....	Springfield IL
1:227/0	Michiana Net .....	219-287-4326	Bob Heide .....	South Bend IN
1:230/0	Net 230 Coordinator .....	219-464-2455	Michael Yadron .....	Northwest IN
1:236/0	North Eastern IN .....	219-925-5524	Donn Bly .....	Auburn IN
1:109/0	Nat'l Capitol Net .....	301-590-3994	Joe Keenan .....	Washington DC
1:2612/0	Southern MD's Mother County Net .....	301-863-5312	Lee Richardson .....	Lexington Park MD
1:2600/0	Central DE .....	302-735-8596	Ed Yakobovitz .....	Dover De
1:150/0	First State Net .....	302-994-3772	Edward DelGrosso .....	Wilmington DE
1:306/0	Northern CO .....	303-229-9719	Rob Diehl .....	Ft. Collins CO
1:315/0	Weld County Net .....	303-352-5013	Bob Kristensen .....	Greeley CO
1:104/0	Denver Area Net .....	303-779-4253	Craig Steiner .....	Littleton CO
1:277/0	North WV Region NC .....	304-594-9169	Michael Smyth .....	Morgantown WV
1:262/0	West Virginia Statewide Net .....	304-756-3811	Scott Hill .....	Charleston WV
1:279/0	WV NET .....	304-766-7807	Tom Freeman .....	Charleston W
1:135/0	South Florida Net .....	305-596-1854	David Bobo .....	Miami FL



# INTERNATIONAL FIDO NETWORK

## LIST OF LOCAL NETWORK COORDINATORS

NET/NODE	NETWORK	DATA PHONE	COORDINATOR	LOCATION
1:369/0	Treasure Coast Net .....	305-771-0041	Sonya Whitaker-Quandt	Lauderdale by the Sea
1:140/0	Sask Net .....	306-382-5746	Ken Read	Saskatchewan Canada
1:303/0	COVBOY NET .....	307-472-3615	Thomas Lange	Casper WY
1:310/0	CHEYENNE & LARAMIE .....	307-638-8508	Jim Taylor	Cheyenne WY
1:316/0	Powder River Net .....	307-686-8042	Al Griffin	Gillette WY
1:232/0	Central IL .....	309-694-7725	Quentin Smith	Creve Coeur IL
1:2380/0	Monroe County Net .....	313-289-2659	Rob O'Dell	Monroe MI
1:2410/0	Detroit/South & West Suburbs .....	313-386-1884	Alex McNeilly	Lincoln Park MI
1:2202/0	Boat Town USA .....	313-468-0912	Dan Dalton	Mt. Clemens MI
1:120/0	Detroit MetroNet .....	313-542-9615	Mike Bader	Ferndale MI
1:2200/0	Southeastern Michigan Net .....	313-665-5927	Tom Winters	Ann Arbor MI
1:2240/0	FlintNet .....	313-743-8464	George Hatchew	Flint MI
1:287/0	SEMO Cape Girardeau Area Net .....	314-334-3605	Danny Walters	Cape Girardeau MO
1:289/0	Mid Missouri Net .....	314-581-6717	Linda Glover	Mexico MO
1:296/0	SEMO-Poplar Bluff Area .....	314-686-6174	William Mallett	Poplar Bluff MO
1:297/0	Lead Belt Area .....	314-756-0750	R Hassell	Farmington MO
1:100/0	St Louis Area .....	314-965-5296	Chelsea Carlstedt	St Louis MO
1:2609/0	Central New York Net .....	315-336-8426	Rob Kozlowski	Rome NY
1:2608/0	Upstate NY NET .....	315-598-8106	Janie Gulliver	Fulton NY
1:260/0	EmpireStateNet .....	315-695-4436	Chris Zazzara	Syracuse NY
1:291/0	Wichita MetNet .....	316-263-5313	John McDowell	Wichita KS
1:298/0	Hutch Net .....	316-663-2989	Todd Wilson	Hutchinson KS
1:2420/0	Montgomery Co Net .....	317-362-5547	Robert White	Crawfordsville IN
1:231/0	Cent IN Fidonet .....	317-535-9097	Brian Murrey	New Whiteland IN
1:201/0	Lafayette Net .....	317-742-5533	Daniel Lawrence	West Lafayette IN
1:2230/0	Southern IN Net .....	317-832-5100	Bart Simpson	Clinton IN
1:2817/0	Central Louisiana Net .....	318-239-3199	Marvin Rush	Leesville LA
1:3807/0	SoWeLa Net .....	318-625-9040	David Wynn	Sulphur LA
1:380/0	S'por/Bossier City .....	318-747-9051	Tom Chandler	La
1:3803/0	Lafayette Area .....	318-989-5248	John Cuccia	Lafayette LA
1:283/0	IowaNetEast .....	319-438-1921	Keith Sippy	Central City IA
1:323/0	RI FidoNet Group .....	401-397-7522	Stan Weyman	Coventry RI
1:285/0	Omaha Ne Vicinity Net .....	402-593-2016	Dave Miller	Papillion NE
1:134/0	Southern Alberta .....	403-293-5129	Norbert Lange	Calgary AB
1:358/0	Southern Alberta WindNet .....	403-327-9731	Laz Gottli	Lethbridge Alta
1:342/0	North Central Alberta .....	403-424-3258	Tom Hall	Edmonton AB
1:3402/0	MooseNet Hub HST .....	403-743-9330	Bruce Anderson	FT McMurray AB
1:133/0	ATLnet .....	404-419-0888	Ken Shackelford	Atlanta GA
1:3616/0	Gainesville GA Net .....	404-532-1978	Ed Ivey	Gainesville GA
1:385/0	SW Oklahoma .....	405-536-8616	Roy Howard	Lawton OK
1:3814/0	Stillwater Area .....	405-624-0301	Paul Cather	Stillwater OK
1:147/0	OKC MetroNet .....	405-736-6878	John burton	Midwest City OK
1:3400/0	Montana Net .....	406-423-5433	Cynthia Denton	Hobson MT
1:363/0	Orlando Data Information Network .....	407-438-7093	Al Hays	Orlando FL
1:3646/0	Treasure Net .....	407-546-0364	Phil McNally	Hobe Sound FL
1:374/0	Space Coast Net .....	407-639-1992	Ken Tuley	Rockledge FL
1:3638/0	Golf Coast Net .....	407-731-1675	Charles Bell	Boynton Beach FL
1:3609/0	Gator Net .....	407-798-2972	Charlie Hein	Loxahatchee FL
1:3633/0	Gateway to the Worlds .....	407-847-5499	Mike Sylvestre	Kissimmee FL
1:143/0	Silicon Valley .....	408-286-1746	Software John	San Jose CA
1:216/0	Monterey Bay Net .....	408-335-4595	John Jamieson	Felton CA
1:3812/0	Brazoria County Net .....	409-265-5958	Bob Henderson	Richwood TX
1:117/0	Brazos Valley Area .....	409-696-8665	Paul Nordin	College Station TX
1:3811/0	S.E.TEXNET .....	409-727-0887	Ilene Hebert	Nederland TX
1:386/0	The Party Net .....	409-744-1240	Mark Miller	Galveston TX
1:2617/0	Points North .....	410-337-0486	Michael Huggins	Parkton MD
1:261/0	Chesapeake MetroNet .....	410-833-8933	Bob Rudolph	Baltimore Area
1:2601/0	Northwest Penn .....	412-346-5535	Charles Ring	Sharon PA

# INTERNATIONAL FIDO NETWORK

## LIST OF LOCAL NETWORK COORDINATORS

NET/NODE	NETWORK	DATA PHONE	COORDINATOR	LOCATION
1:2615/0	Southwest Penn	412-439-2376	Chuck Baugh	Uniontown PA
1:2610/0	Southwest-Penn Net	412-832-8185	Michael Scott	Greensburg PA
1:129/0	Pitt-Net #1 City	412-856-1428	Paul Kelly	Pittsburgh PA
1:321/0	MassNet West	413-256-1037	Morton Sternheim	Amherst MA
1:154/0	SE Wisconsin LATA	414-251-2580	Bob R.	Menomonee Falls WI
1:139/0	N.E. WI & U.P. MI	414-725-7598	Bruce Casner	Neanah WI
1:204/0	SF Peninsula Net	415-572-9563	Les Kooymann	San Mateo CA
1:125/0	SF Bay Net	415-621-0567	William Sommers	San Francisco CA
1:244/0	Steel City Net	416-385-9610	Gary Green	Hamilton Area ON
1:259/0	Halton/Peel Network	416-542-8174	Bryan Fedorowski	Halton/Peel ON
1:229/0	Durham Net	416-579-6302	Rick Johnston	Oshawa Ontario
1:250/0	Metro Toronto Net	416-744-0070	Robert Ensing	Rexdale ON
1:247/0	Niagara Thunder Net	416-935-6628	John Giesbrecht	St.Catharines ON
1:286/0	Ozark Net	417-673-2283	Tim Pearson	Joplin MO
1:284/0	Springfield Area Net	417-887-4144	Harry Spicer	Springfield MO
1:240/0	QUEBEC EAST	418-648-9590	Andre Morin	Quebec QC
1:234/0	Maumee Valley Net	419-478-7333	Chris Franklforth	Toledo OH
1:3821/0	LR Metro	501-227-9600	B McCormick	Little Rock AR
1:399/0	Central Arkansas Net	501-450-9045	Richard Shumate	Conway AR
1:3822/0	Paradox of Arkansas	501-484-0944	Fred Ayers	Fort Smith AR
1:3823/0	BCSA Net	501-631-9131	Ken McDowell	Rogers AR
1:391/0	NoWe ARK Net	501-751-3714	Bert Edens	NorthWest AR
1:3809/0	ARK NET	501-862-0564	Chuck Simons	El Dorado AR
1:389/0	East Arkansas Net	501-932-6961	Jon Wagner	Bono AR
1:2450/0	Gold City Net	502-351-2728	Ron Ballard	Radcliff KY Ft Knox KY
1:2320/0	Derby City Net	502-964-7827	Scott Goldbach	Louisville KY Southern IN
1:105/0	VanPort Net	503-297-9145	The Curmudgeon	South WA & North OR
1:3406/0	Outer Limits	503-581-0191	John Kegley	Salem OR
1:152/0	Willamette Valley Network	503-687-5991	Russ Johnson	Eugene OR
1:349/0	SoNet	503-846-7170	Jonathan Talon	Southern Oregon
1:356/0	(9pm-9am PST) Oregon Coast Net	503-888-5222	Lewis Cosper	Charleston OR
1:357/0	Mid-Willamette Valley Net	503-928-9535	Khille Klock	Albany OR
1:3800/0	Baton Rouge Area	504-273-3116	Stan Brohn	Baton Rouge LA
1:394/0	Hammond Area Users Group	504-386-8827	S. Williams	Ponchatoula LA
1:390/0	Southeast Louisiana Net	504-641-4789	Glen Strecker	Slidell LA
1:384/0	South Louisiana	504-868-1440	Raymond Barnes	Houma LA
1:396/0	New Orleans Area	504-888-6515	John Woodward	New Orleans LA
1:301/0	Albuquerque Metro Area Net	505-255-3623	Dan Mancuso	Albuquerque NM
1:308/0	The Tularosa Basin Net	505-479-2131	Doug Foote	Holloman AFB NM
1:305/0	Whole Enchilada Net	505-523-2811	Ken Flory	Las Cruces NM
1:313/0	Southeastern New Mexico Net	505-625-5795	George Lee	Roswell NM
1:317/0	Central New Mexico Electronic Connection	505-865-4082	Walter Franklin	Belen NM
1:255/0	Atlantic Canada	506-635-1964	Bill Walton	NB NS NF PI
1:292/0	South Minnesota Net	507-281-9886	Rob Richter	Rochester MN
1:324/0	MassNet NE Coord	508-454-3864	Dave Layte	Lowell MA
1:329/0	SE MASS NET	508-636-9162	Mike Girard	Westport MA
1:331/0	Cape & Islands	508-760-2147	A Wyatt	Cape Cod
1:333/0	MassNet MetroWest	508-788-1603	Perry Lowell	Framingham MA
1:330/0	MassNet East	508-927-2537	Bob Chesley	Beverly MA
1:322/0	MassNet Central	508-949-3590	Don Eklund	Webster MA
1:346/0	WA Inland Empire	509-276-6431	Susan Waters	Deer Park WA
1:3407/0	SE Washington Net	509-582-9493	Tom Carroll	Tri-Cities WA
1:344/0	THE CENTRAL Washington State Net	509-884-7803	Dan Hartmann	East Wenatchee WA
1:161/0	SF EAST BAY	510-426-0793	Bill McCauley	Pleasanton CA
1:215/0	East Alameda County Net	510-881-7678	John Nobriga	Castro Valley CA
1:382/0	Capitol City	512-335-7949	Michael Masterson	Lake Travis TX
1:3802/0	Crossroads Net	512-576-3893	Katherine Schroeder	Victoria TX
1:160/0	South TX Gulf Coast	512-994-9643	Tom Harper	Corpus Christi TX



# INTERNATIONAL FIDO NETWORK

## LIST OF LOCAL NETWORK COORDINATORS

NET/NODE	NETWORK	DATA PHONE	COORDINATOR	LOCATION
1:110/O	DAYTON Area .....	513-439-9217	Decker Doggett .....	Dayton OH
1:167/O	Ouest Quebec West .....	514-364-2937	Steve Montleith .....	Lasalle PQ
1:242/O	Hote Laurentides Quebec .....	514-432-8467	Raymond Beriau .....	Bellefeuille PQ
1:290/O	CIA Central Iowa Net .....	515-285-1190	Jim Louvau .....	Des Moines IA
1:2470/O	Adrian Area FidoNet .....	517-263-0273	Chris Bourne .....	Adrian MI
1:159/O	Mid Michigan Net .....	517-321-0788	John Herrbach .....	Lansing MI
1:239/O	Knuckle Net .....	517-752-3203	Kerry Penny .....	Saginaw MI
1:2330/O	Jackson Area FidoNet .....	517-789-7556	Tony Bengel .....	Jackson MI
1:267/O	Adirondack Net .....	518-761-0869	Brian Dunworth .....	Glens Falls NY
1:246/O	Great Lakes Central .....	519-250-8414	Bryan Hochberg .....	Windor ON
1:245/O	Tobacco Net .....	519-428-9287	Peter Plak .....	Simcoe ON
1:221/O	South West Ontario .....	519-653-7677	Royce Jones .....	Cambridge ON
1:368/O	DELTAet .....	601-453-3963	Ken Jackson .....	Greenwood MS
1:3604/O	MS Gulf Coast Net .....	601-467-0801	Billie Cohen .....	Bay St Louis MS
1:361/O	Central Mississippi .....	601-634-1625	Bob Williams .....	Vicksburg MS
1:3610/O	North Mississippi Net .....	601-842-9255	Steve Bishop .....	Tupelo MS
1:3632/O	Jackson Metro .....	601-992-9459	Ray Leninger .....	Jackson MS
1:114/O	Phoenix Area .....	602-242-3158	Rob Donaldson .....	Phoenix AZ
1:309/O	The Southern Arizona NET .....	602-458-9342	Robin Moore .....	Sierra Vista AZ
1:304/O	High Mountain BBS .....	602-527-8404	Gregori Smith .....	Flagstaff Az
1:314/O	Kingman Net Coordinator .....	602-757-0385	Doug Preston .....	Kingman AZ
1:300/O	Pueblo NET .....	602-881-3769	Jerry Cain .....	Tucson AZ
1:132/O	New England-North .....	603-641-2017	Paul Roemer .....	Manchester NH
1:3404/O	North Cariboo Net .....	604-249-5889	Mike Hindle .....	Quesnel BC
1:153/O	Pacific Rim .....	604-574-0906	Tony Bearman .....	GVRD (Cloverdale BC)
1:340/O	Canada West Net .....	604-595-4407	Alex Stuart .....	Victoria BC
1:351/O	Central & N. Vancouver Is. .....	604-753-1145	Herb Addison .....	Nanaimo BC
1:353/O	Southern Interior Net .....	604-764-4672	Bob Shiells .....	Kelowna BC
1:3405/O	Peace River Net .....	604-785-7926	Patrick Jensen .....	Fort St John BC
1:359/O	North/Central BC .....	604-962-5971	Rob Nelson .....	Prince George BC
1:288/O	Dakotas' Net .....	605-332-3191	Bill Bartell .....	Sioux Falls SD
1:293/O	Western Dakota Net .....	605-348-4113	Steve Fuqua .....	Rapid City SD
1:2370/O	Lexington Area .....	606-269-1565	Don Bodley .....	Lexington KY
1:108/O	CincyNet .....	606-727-3638	Rick Ashworth .....	Cincinnati OH
1:2260/O	Ohio River Net .....	606-836-1267	Charlie Carter .....	Worthington KY
1:121/O	Madison Area .....	608-256-3611	Ed Almasy .....	Madison WI
1:2360/O	Western Wisconsin Net .....	608-526-3561	Bill Sweet .....	Holmen WI
1:266/O	51st State .....	609-482-8604	Barry Geller .....	Maple Shade NJ
1:282/O	Twin Cities Metronet .....	612-938-1875	Steve Sherwick .....	Mpls/St. Paul MN
1:256/O	The Valley Net .....	613-259-2626	Cliff Morrison .....	Lenark ON
1:163/O	Canada's Capital .....	613-446-6234	Jim Brown .....	Ottawa ON
1:249/O	Lake Ontario Net .....	613-548-3295	Mike Pastien .....	Kingston ON
1:241/O	Upper Ottawa Valley Net .....	613-687-4680	Dale Kaechler .....	Petawawa ON
1:243/O	Ottawa's Alternative Net .....	613-726-7249	Dave Hunter .....	Nepean ON
1:248/O	St. Lawrence Seaway Net .....	613-938-5498	Dean Lavolette .....	Cornwall ON
1:2350/O	SoCenOhioNet .....	614-335-4980	Rick Morris .....	Washington CH Oh
1:226/O	Buckeye-Net .....	614-457-1701	David Pointer .....	Columbus OH
1:2220/O	Chilli-Net .....	614-772-5583	Keith Wineka .....	Chillicothe Oh
1:3643/O	Rural SE Tennessee Net .....	615-442-2833	Jeff Cook .....	Madisonville TN
1:3655/O	CrossNet .....	615-456-4096	Rick Haburne .....	Crossville TN
1:362/O	Chatta-NET METRO .....	615-499-4493	Mike Hill .....	Chattanooga TN
1:3637/O	Cumberland TN Area .....	615-526-3347	Dean Carothers .....	Cookeville TN
1:3621/O	Clarksville Net .....	615-552-7183	Marty Foster .....	Clarksville TN
1:3615/O	TN Valley Net .....	615-573-1357	Kent Ogle .....	Knoxville TN
1:116/O	Middle Tennessee Area .....	615-646-2842	Jerry Dunlap .....	Nashville TN
1:3642/O	Southern Appalachian Net .....	615-878-2286	Larry Hayes .....	Bristol TN
1:3622/O	PYLANT SPRINGS NET .....	615-967-7345	JD Brown .....	Winchester TN
1:228/O	West Michigan Fido Net .....	616-363-2373	Bill DeBlase .....	Grand Rapids MI
1:2201/O	Greater Kalamazoo Net .....	616-375-2085	Phil Pattengale .....	Kalamazoo MI

# INTERNATIONAL FIDO NETWORK

## LIST OF LOCAL NETWORK COORDINATORS

NET/NODE	NETWORK	DATA PHONE	COORDINATOR	LOCATION
1:2340/0	S.W. Michigan Net.....	616-468-5026	Tim Akright	Coloma MI
1:2390/0	Greenville Net.....	616-754-6180	Harry Moyles	Greenville MI
1:101/0	Boston Metro.....	617-729-4164	Stephen McRae	Winchester MA
1:2222/0	Southern Illinois.....	618-549-1129	Mike Harrell	Carbondale IL
1:2290/0	So. Illinois Net.....	618-596-4391	Jeff Rice	Mulkeytown IL
1:2250/0	East of St Louis.....	618-692-2169	John Druke	Edwardsville IL
1:219/0	High Desert Net.....	619-253-4437	Bill Turner	Barstow CA
1:202/0	San Diego Co CA.....	619-278-7086	Brenda Donovan	San Diego CA
1:3824/0	Central Texas Temple Mailer.....	7-778-7754	Brett Pany	Temple TX
1:213/0	Northern Nevada.....	702-322-4497	Lance P Taylor-Warren	Reno NV
1:209/0	Vegas Net.....	702-731-9453	John Le Duc	Las Vegas NV
1:274/0	CENTRAL VA NET.....	703-373-2416	John Schreiber	Falmouth VA
1:265/0	SOUTHERN NORTHERN VA NET.....	703-494-1822	NC NET265	Woodbridge Va
1:2602/0	SouthWestern Virginia Net.....	703-552-9357	Ken Long	Blacksburg VA
1:379/0	NC WEST NET.....	704-544-2515	Carl Neal	Charlotte NC
1:252/0	Georgian Bay Net.....	705-322-2643	Glenn Pinel	Elmvalle ON
1:225/0	Near North Net.....	705-494-9329	Jesse David Hollington	North Bay ON
1:224/0	The Sudbury and Area Net.....	705-693-1879	Richard Dewolfe	Sudbury ON
1:222/0	SAULT NO.....	705-945-7894	Patrick Valade	Sault Ste. Marie ON
1:370/0	NE Georgia Network.....	706-208-9859	Tim Wool	Athens GA
1:3613/0	West Central Ga & East Central Al Net.....	706-322-4236	Archie Caldwell	Columbus GA
1:3656/0	LaGrange Net.....	706-884-5166	Pat Curry	LaGrange GA
1:115/0	Chicagoand Coordinator.....	708-657-1113	NC Steve Levinthal	Glenview IL
1:106/0	Houston Area.....	713-556-5464	Scott Royall	Houston TX
1:103/0	Orange Co CA.....	714-638-2298	Jim Ward	Garden Grove CA
1:238/0	Central WI.....	715-539-2950	William Sloggy	Merrill WI
1:2300/0	West WI Net.....	715-723-7879	Michael Walker	Chippewa Falls WI
1:2613/0	Greater Rochester Net.....	716-442-8144	Phillip Dampier	Rochester NY
1:270/0	Central PA Net.....	717-944-0655	Gary Rux	Middletown PA
1:268/0	Pocono Net.....	717-992-4467	Robert Zellers	Brodheads ville PA
1:2603/0	All New York City Net.....	718-853-8957	E. Deringer	Brooklyn NY
1:278/0	NYCNet Network Coordinator.....	718-951-4631	Howie Ducat	New York City NY
1:307/0	SE Colo Net.....	719-269-9261	Richard Cochran	Canon City CO
1:128/0	Pikes Peak Net.....	719-599-4568	Preston Smith	Colorado Springs CO
1:311/0	Salt Lake NET.....	801-255-8909	Robert Elegante	Midvale UT
1:312/0	Utah County NET Coordinator.....	801-377-8919	Alif Ambler	Provo UT
1:302/0	CACHE VALLEY NET.....	801-563-4098	Stewart Hunsaker	Smithfield UT
1:325/0	Surprising Vermont.....	802-985-8802	J Antram	Shelburne Vermont
1:3639/0	Upstate SC.....	803-271-1092	John Nettles	Greenville SC
1:360/0	Augusta Net.....	803-279-5006	Ed Meloan	North Augusta SC
1:3627/0	Myrtle Beach Net.....	803-293-2295	Pat Finnerty	Myrtle Beach SC
1:364/0	North West SC Net.....	803-296-2870	Joe Lemere	Anderson SC
1:3651/0	Unicom Express NET.....	803-383-6369	Neyssa Dormish	Hartsville SC
1:3631/0	Greenwood Net.....	803-456-2982	David Dean	Greenwood SC
1:3647/0	Sumter Net.....	803-499-4316	Gale Wilkinson	Sumter SC
1:3650/0	The Beaufort Network.....	803-522-3303	Bruce Parker	Beaufort SC
1:3652/0	SPAMNET Net Coordinator.....	803-573-7069	Ross Cassell	Spartanburg SC
1:3624/0	Alken Net.....	803-649-4171	Ed Rldpath	Aiken SC
1:372/0	Charleston Net.....	803-769-4922	Yvonne Rea	Charleston SC
1:376/0	Cola Net.....	803-957-1846	Shay Walters	Columbia SC
1:275/0	SouthEast Virginia Net.....	804-496-3320	Warren King	Virginia Beach VA
1:276/0	Net 276 Lynchburg.....	804-525-9760	Stacy Smith	Lynchburg VA
1:271/0	Tidewater VA Net.....	804-566-0219	Hershel Kreis	Williamsburg VA
1:264/0	Mid Virginia Net.....	804-747-8895	Bill Fisch	Richmond VA
1:2618/0	Net 2618 Charlottesville.....	804-979-2035	Peter Clausen	Charlottesville VA
1:210/0	Kern County Net.....	805-322-8800	Steve Garcia	Bakersfield CA
1:206/0	Ventura County Net.....	805-488-8973	Phil Hoppe	Oxnard CA
1:3816/0	Top O' Texas Net.....	806-354-8088	Kevin Murie	Amarillo TX
1:3804/0	Lubbock Net.....	806-745-0114	Kevin Elam	Lubbock TX



# INTERNATIONAL FIDO NETWORK

## LIST OF LOCAL NETWORK COORDINATORS

NET/NODE	NETWORK	DATA PHONE	COORDINATOR	LOCATION
1:345/0	Pacific Region Fido.....	808-247-7328	Ron Skates	Honolulu HI
1:367/0	Puerto Rico Net.....	809-783-9542	Luis Salazar	San Juan PR
1:2310/0	River City Net.....	812-983-9139	Paul Billingsley	Southern IN SE IL NW KY
1:377/0	Tampa Bay Net.....	813-265-3255	Wes Cowley	Tampa FL
1:3630/0	On The Gulf.....	813-455-6390	Glenn Niesen	Naples FL
1:137/0	Florida Suncoast Net.....	813-492-9592	J. Grossberg	Venice FL
1:378/0	SW Florida Coast Net.....	813-625-5636	Sydney Marcus	Port Charlotte FL
1:3603/0	PinellasNET.....	813-796-2486	Neil Lauritsen	Clearwater FL
1:3635/0	PolkNet.....	813-858-3065	Lenny Lacey	Lakeland FL
1:3619/0	West Pasco Net.....	813-862-8850	Ralph LoBlanco	Port Richey FL
1:371/0	SW Florida Coast Net.....	813-939-3394	David Corthell	Fort Myers FL
1:2616/0	Flood Net.....	814-539-9920	Albert Baldish	Johnstown Pa
1:2210/0	Rockford Area.....	815-633-6455	Roy Feltner	Loves Park IL
1:2270/0	Freeport Area Net.....	815-868-2422	Kevin Zimmerman	McConnell IL
1:294/0	The Midland Empire Net.....	816-238-1838	Michael Fuson	St Joseph MO
1:280/0	KC Area Net.....	816-763-2181	Mike Reardon	Kansas City MO
1:393/0	TX Triangle.....	817-381-1024	Jaret Lehman	Denton TX
1:130/0	The CowTown Net.....	817-444-0027	Alan Feemster	Azle TX
1:395/0	Killeen Area NC.....	817-547-5032	John Doty	Kempner TX
1:3818/0	Granbury Area.....	817-573-6700	Tom Goodman	Granbury TX
1:388/0	HOT NET Waco.....	817-666-5137	Bob Brown	Waco TX
1:3805/0	Wichita Falls Area.....	817-855-4958	Tim Longley	Wichita Falls TX
1:257/0	Eastern Township NC.....	819-564-3442	Erick Hamel	Sherbrooke QC
1:123/0	Mid-South Net.....	901-767-2503	Bill Paul	Memphis TN
1:251/0	Nova Scotia Net.....	902-454-8351	Steven Morrison	Halifax Nova Scotia
1:3801/0	East Texas Net.....	903-534-1918	Bill Roper	Tyler TX
1:398/0	Piney Woods Net.....	903-758-0960	Charles Lamere	Longview TX
1:3819/0	Texarkana Net.....	903-838-6713	Mike Dumdai	Texarkana TX
1:3605/0	Tally-Net.....	904-224-0787	Paul Diestelhorst	Tallahassee FL
1:3608/0	Panama City Net.....	904-286-5125	Charles Thompson	Panama City FL
1:3649/0	Pulnam County Net.....	904-328-6150	Jerry VanDerMeulen	Palatka FL
1:365/0	North Central Fla Net.....	904-368-6945	Eric Carr	Ocala FL
1:3601/0	Florida Gator Net.....	904-377-2082	David Rockey	Gainesville FL
1:3612/0	PensaNET [HST/DS].....	904-494-9731	Lee Herron	Pensacola FL
1:3653/0	Citrus County Net.....	904-563-0358	Mark Davis	Crystal River FL
1:366/0	NW Florida.....	904-581-2646	Mark Storm	Hurlburt Field FL
1:112/0	NE Florida Coast.....	904-645-6297	Steve Shapiro	Jacksonville FL
1:3623/0	Daytona Net.....	904-673-4085	Brian Eila	Ormond Beach FL
1:3600/0	Tie Line Net.....	904-758-9477	Jeff Hancock	Lake City FL
1:3618/0	West Volusia Fl Net.....	904-789-6843	Lee Noga	Deltona FL
1:3620/0	Ancient City Net.....	904-826-4411	Jerry Ray	St. Augustine FL
1:3654/0	Walton Net.....	904-836-5143	Robert Nelson	DeFuniak Spgs FL
1:2280/0	SuperiorLand Net.....	906-486-6836	Bruce Ruona	Ishepeming MI
1:355/0	Alaska Midnight Sun Net.....	907-452-1460	P Stern	Fairbanks AK
1:107/0	MetroNet of New Jersey & Long Island.....	908-572-1202	Burt Juda	Edison NJ
1:2605/0	Northern NJ.....	908-752-9117	Tom Lawrence	N NJ
1:207/0	Inland Empire NET.....	909-381-6013	Rod Bowman	Colton CA
1:218/0	Pomona Valley Net.....	909-947-7478	Jonathan Hart	Ontario CA
1:3645/0	SCntri Georgia Net.....	912-247-6977	Andy Smith	Valdosta GA
1:3640/0	SE Georgia Net.....	912-882-2504	Karen Maynor	St Marys GA
1:3617/0	Albany Net.....	912-888-0656	Richard McDuffie	Albany GA
1:3611/0	Mid Ga Net.....	912-923-2065	John Sherman	Warner Robins GA
1:3626/0	The Savannah Network.....	912-964-2425	Don Murray	Savannah GA
1:281/0	Topeka Area Net.....	913-271-2071	Mike Ortiz	Topeka KS
1:2800/0	Mid Kansas Net.....	913-776-0111	Jim Lund	Manhattan KS
1:295/0	Saline County Net.....	913-827-3733	Chris Hallock	Salina KS
1:299/0	LawrenceNET.....	913-842-4210	Tony Spangler	Lawrence KS
1:272/0	South East NY.....	914-344-0350	Janis Kracht	Middletown NY

# INTERNATIONAL FIDO NETWORK

## LIST OF LOCAL NETWORK COORDINATORS

NET/NODE	NETWORK	DATA PHONE	COORDINATOR	LOCATION
1:3808/0	Midessa Net NC	.915-520-3555	David Galyon	Midland Tx
1:381/0	West Texas Net	.915-590-9798	Daniel Hagan	El Paso TX
1:383/0	San Angelo Net	.915-651-5487	Dan Lee	San Angelo TX
1:392/0	Big Country Net	.915-691-9755	Mike Vaughn	Abilene Tx
1:203/0	Sacramento Metro	.916-338-5227	Mark Stennett	Sacramento CA
1:211/0	The Foothills 49er Net	.916-432-3179	Dennis Diaz	Grass Valley CA
1:119/0	Alta California Net	.916-893-8079	Richard Ratledge	Chico CA
1:3815/0	Bartlesville Area	.918-333-6905	Ted Pugh	Bartlesville OK
1:170/0	Tulsa Area	.918-622-1437	JB Graham	Tulsa OK
1:3813/0	Muskogee Area	.918-682-7337	Lloyd Hatley	Muskogee OK
1:3644/0	Alamance Net	.919-226-6984	Chris Laforet	Graham NC
1:3641/0	Durham Net	.919-383-4905	Tom Faulkner	Durham NC
1:3614/0	Jacksonville NC Net	.919-455-1933	Phil Ferraro	Jacksonville NC
1:3634/0	Fayetteville Net	.919-630-1572	John Waters	Fayetteville NC
1:3629/0	New Bern Net	.919-637-3583	Donnie Benners	New Bern NC
1:3648/0	The Central Carolina Network	.919-672-3105	Rocky Hurley	Asheboro NC
1:3628/0	Coastal Carolina Net	.919-763-1850	Mark Samwick	Wilmington NC
1:151/0	NC Net	.919-851-3780	Bill Weinel	Raleigh NC
1:3636/0	The Sandhills Net	.919-944-1165	John White	Aberdeen NC

### ZONE 2 - EUROPE

2:410/0	GreekNet	.30-31-445352	George A. Michalopoulos	Thessaloniki GR
2:285/0	Host Holland South-West	.31-1150-18742	Peter Smink	Terneuzen Holland
2:286/0	Dutch Independent Network	.31-1749-44958	Ben de Goeij	Monster Holland
2:280/0	DFF (Tip Top) Backbone & Host (NC)	.31-20-6751585	Max Keizer	Amsterdam NL
2:2800/0	Collectief Fido Net Host NL	.31-20-6755502	Ad Kooy	Amsterdam NL
2:2801/0	Nethost Totaal-Net	.31-20-6893869	Piet Ebbes	Amsterdam
2:283/0	Host Holland Mid/East	.31-35-237178	Jan Bredenberg	Hilversum Holland
2:284/0	NC284 Net Coordinator	.31-4183-4813	Patrick Maertense	Kerdlief
2:512/0	PCM Net	.31-4780-88119	Joop Mellaart	Venray Netherlands
2:282/0	Host Holland North-East	.31-5910-34029	Rick Kelly	Emmen NL
2:281/0	Host Holland North-West	.31-71-613263	Elco De Graaff	Voorschoten Holland
2:500/0	HCC net	.31-8380-37156	Henk Wevers	Ede
2:291/0	North West Belgium	.32-2-5826650	Kris Carlier	Lennik B
2:293/0	South Belgium	.32-41-522026	Eric Lapaille	Liege
2:292/0	North-East Belgium	.32-89-658770	Willy Brepols	As
2:320/0	Net Paris	.33-1-30516504	Christian Perrier	Maurepas
2:322/0	Net Nord NC	.33-20392225	Edmond Vandermeersch	Wervicq-Sud
2:321/0	Net Centre	.33-47293385	Derrick Neve	Tour FRANCE
2:324/0	Sud-Ouest	.33-61630861	Marc Neiger	Toulouse
2:323/0	Net Sud-Est	.33-78219665	Georges Bourne	Mions
2:325/0	Net Est NC	.33-84268606	Mathieu Chappuis	Belfort
2:341/0	Castilla Centro	.34-1-5477210	Santiago Crespo	Madrid
2:340/0	Islands Net	.34-22-344359	Jose-Maria Andreu	Spain
2:343/0	Xarxa Catalana	.34-3-3296590	Tirs Abril	Catalunya
2:344/0	Norte Verde Net	.34-4-447-9012	Eduardo Jacob	Spain
2:345/0	Andalucia	.34-5-4163114	Juan Ignacio Rodriguez	Spain
2:346/0	Llevant Net	.34-6-666-1325	Orlando Castillo	Elx A
2:347/0	Balear Net	.34-71-24-6220	Defin Rosales	Palma Mallorca
2:348/0	Galicia Net	.34-82-410902	Manuel Fuentes	Spain
2:362/0	NC362 Centro	.351-1-4352629	Afonso Vicente	Queluz Portugal
2:361/0	Norte	.351-34-313554	Fausto Carvalho	P
2:270/0	Luxembourg Net	.352-45-0173	Andre Welland	Merl
2:263/0	Temporary NC	.353-402-35308	Diane Duane	Dublin Ireland
2:391/0	IcelandNET	.354-2-14628	Jon Fannar Karlsson	Kef Iceland



# INTERNATIONAL FIDO NETWORK

## LIST OF LOCAL NETWORK COORDINATORS

NET/NODE	NETWORK	DATA PHONE	COORDINATOR	LOCATION
2:220/0	Helsinki Area	358-0-259656	Jari Nousiainen	Tuusula
2:221/0	Southern Finland Network	358-18-7818913	Pirkka Luukkonen	Lahti
2:222/0	West Finland's Net	358-24-315140	Pasi Eronen	Salo Finland
2:227/0	Eastern Finland Net	358-57-816722	Sami Kinnunen	Rantasalmi
2:228/0	Northern Finland	358-83-410041	Toni Mykkanen	Ylivieska
2:350/0	Sofia Net	359-2-519011	Dimitar Ganchev	Sofia Bulgaria
2:359/0	East Net	359-52-259108	Daniel Kalchev	Varna Bulgaria
2:371/0	Budapest NET	36-1-166-8809	Pal Osgyany	Budapest HUN
2:372/0	West Hungary NET	36-22-318-039	Bela Mucs	Szekefehervar HUN
2:370/0	Tisza NET	36-56-422-189	Erno Petro	Szolnok HUN
2:472/0	NET Shialui	370-14-26724	Svajunas Lauknetis	Shialui Lithuania
2:471/0	NET Vilnius	370-2-227194	Robertas Sileikis	Vilnius Lithuania
2:470/0	NET Kaunas	370-7-706956	Sergey Schepetnov	Kaunas Lithuania
2:4790/0	Riga Net	371-2-224980	Raitis Misins	Riga Latvia
2:490/0	NET Estonia	372-2-443557	Sulo Kallas	Tallinn Estonia
2:469/0	Moldova and Romania Net	373-2-263079	Michael Karpov	Moldova
2:382/0	Beograd	38-11-403953	Zoran Janevski	SRJ
2:381/0	Croatia	38-58-320444	Zdravko Blagdan	HR
2:380/0	Slovenia	38-66-34986	Gregor Rudolf	SLO
2:334/0	North-West Italy	39-11-3858269	Angelo Verdone	Torino
2:331/0	Milano & Hinterland	39-2-781068	Giancarlo Cairella	Milano I
2:333/0	Fri-Ve-Net	39-434-32020	Adolfo Melilli	Italy
2:332/0	Italy88 Telnet	39-574-433345	Franco Mulato	Prato FI Italy
2:335/0	Italia Centro Sud	39-766-540899	Stefano Pasquini	Italy
2:301/0	United Fido-Networks	41-1-4634001	Oliver von Bueren	Switzerland
2:423/0	Czech NET	42-184-3893	Jaromir Zachata	Tachov CSFR
2:424/0	Easy Connection Network	42-2-802908	Voita Kment	CSFR Prague
2:420/0	Prague NET	42-2-843174	Jakub Vanek	Prague CSFR
2:421/0	Morava Net	42-5-750455	Alexandr Falta	Brno
2:422/0	Slovak NET	42-7-844188	Denis Havila	Bratislava Slovakia
2:310/0	ViennaNet	43-1-454330	Werner Schlagnitweit	Vienna A
2:313/0	Lower-Austria Net	43-2243-85997	Wilhelm Rabl	Klosterneuburg Austria
2:316/0	SyriaNet	43-316-384842	Thomas Obermayr	Graz A
2:317/0	Tirol Net	43-5223-44085	Bernhard Moser	Hall A
2:318/0	FarWest-Austria Net	43-5525-312683	Franz Ehgartner	Gais A
2:314/0	Upper-Austria Net	43-7223-5966-30	Albert Fischlmayr	Kronstorf A
2:259/0	Scottish Net	44-241-828793	Frank Peterson	Arbroath UK
2:444/0	Wilts & Oxon Geo-Net	44-249-817704	Ade Truelove	Caine UK
2:255/0	SouthWest & CI Net	44-392-495899	John Burden	Exeter UK
2:441/0	Net441	44-424-853361	Peter Burnett	Net441
2:256/0	Tyne-Tees & North-East UK	44-434-60-6639	John Rawson	Tyneside UK
2:250/0	Northern Net	44-484-653234	Chris Townsend	Huddersfield
2:251/0	Southern Net	44-705-511590	Stephen Cole	Gosport UK
2:440/0	SouthEast Net	44-732-845338	Colin Spice	Kent UK
2:252/0	South Central	44-734-461466	David Rance	Reading UK
2:442/0	Welsh Net	44-745-855959	John Timmis	Prestatyn Wales UK
2:254/0	London Net	44-81-566-5393	John Taylor	London
2:258/0	Net258	44-829-782667	Edward Hobson	Chester UK
2:253/0	Central Net	44-905-775191	Pete Franchi	Droitwich UK
2:257/0	Herts Essex & East Anglia Net	44-992-448903	Noel Bradford	Hertfordshire UK
2:234/0	Mosquito Network Ass.	45-44444133	Keld Hansen	Denmark
2:231/0	DaneNet	45-53911503	Bjoern Loendahl	Denmark
2:230/0	DANE TECH	45-86-936822	Thomas Schmidt	Denmark
2:204/0	Central Net	46-19-322816	Thomas Stjernstrom	Orebro SE
2:206/0	Uppsala-Vasteras Net	46-21-353455	Mats Mattsson	Vasteras Sweden
2:205/0	North Net	46-291-10158	Anders Brink	Sweden
2:203/0	West Net	46-31-960447	Bjorn Felten	Sweden
2:200/0	South Net	46-46-304878	Ulf Ahlgren	Lund Sweden

# INTERNATIONAL FIDO NETWORK

## LIST OF LOCAL NETWORK COORDINATORS

NET/NODE	NETWORK	DATA PHONE	COORDINATOR	LOCATION
2:201/0	Capital Net.....	46-8-6453882	Mats Wallin.....	Stockholm Sweden
2:210/0	Norway South.....	47-22221064	Ola Garstad.....	Oslo NO
2:502/0	Norway Old Net.....	47-22221064	Ola Garstad.....	Oslo Norway
2:211/0	Norway West.....	47-5-990090	Per-Arne Flatberg.....	Bergen NO
2:212/0	Norway North.....	47-83-82371	Stein-Ivar Johnsen.....	Tromsøe NO
2:486/0	South Net.....	48-12-218777	Maciej Piotrowski.....	Poland
2:480/0	Mazovia Net.....	48-22-339649	Rafal Wiosna.....	Poland
2:481/0	North Net.....	48-52-411222	Mariusz Boronski.....	Poland
2:2401/0	Rhein/Ruhr Netzwerk.....	49-203-335378	Klaus-Dieter Thelen.....	Duisburg
2:241/0	UNITED NETWORK OF GERMANY.....	49-2102-68004	Helmut Sauer.....	Germany
2:242/0	AltIPlex Net.....	49-211-5560429	Siegfried Osterloh.....	FRG
2:2402/0	RHEINLAND-NETWORK.....	49-228-680509	Ruediger Fischer.....	GERMANY
2:245/0	Westfalen-Net(I).....	49-2381-889812	Wolfgang Schoenrath.....	Germany
2:243/0	Big SCIENCE NET.....	49-2624-6626	Dietmar Uhr.....	Germany
2:2403/0	Berlin Net.....	49-30-4324040	Horst Pasche.....	Berlin
2:240/0	NDS/SLH-NET.....	49-511-8379986	Peter Rohde.....	Germany
2:248/0	Ara Net Wiesbaden.....	49-611-608807	Hans Koehncke.....	Germany FRG
2:247/0	HessenNet.....	49-6151-21298	Arno Krause.....	Germany
2:2405/0	Area Net BERGSTRASSE.....	49-6155-76384	Thomas Gierg.....	Bergstrasse FRG
2:249/0	Frankfurt Area Net.....	49-69-7073443	Ralf Pradella.....	Frankfurt/Main Germany
2:2407/0	Rapid Net.....	49-7141-26304-2	Uwe Schikowski.....	Asperg
2:244/0	Schwaben-Netz.....	49-7172-2743	Axel Golob.....	Germany
2:246/0	Netz 246/Bavaria.....	49-911-651900	Toni Gerhard.....	Germany
2:2400/0	Franken Net.....	49-911-9975801	Joerg Dassler.....	Germany
2:478/0	West Russia.....	7-0112-465487	Alexander Feldman.....	Kaliningrad Russia
2:451/0	Crowd of friends.....	7-015-247-1549	Sergey Eremin.....	Grodno Belarus
2:450/0	Fantasy Net.....	7-0172-264560	Igor Scherbakov.....	Minsk Belarus
2:462/0	West Ukraine.....	7-0322-769371	Pavel Godlevsky.....	Lviv Ukraine
2:463/0	Middle Ukraine.....	7-044-4175700	Vladimir Leeman.....	Kiev Ukraine
2:4635/0	Cherkassy Net.....	7-0472-472078	Andrei Nikolaev.....	Cherkassy Ukraine
2:467/0	Odessa Net.....	7-0482-218272	Oleg Levchenko.....	Odessa Ukraine
2:4632/0	Alexandria NET.....	7-05235-25093	Juri Sidorow.....	Alexandria Ukraine
2:464/0	Dniepr NET.....	7-0562-780612	Andrei Pakhutin.....	Dnepropetrovsk Ukraine
2:461/0	North East Ukraine.....	7-0572-210555	Vadim Garbooze.....	Kharkov Ukraine
2:465/0	East Ukraine.....	7-0622-957214	Andrew Kholodenin.....	Donetsk Ukraine
2:4657/0	AzovNet.....	7-0629-349596	Vladimir Danilov.....	Mariupol Ukraine
2:4615/0	Lugansk Net.....	7-0642-528607	Dmitri Balukov.....	Lugansk Ukraine
2:460/0	Crimea Net.....	7-0652-245823	Sergey Starosek.....	Simferopol Crimea
2:5025/0	Chernozem Net.....	7-073-255-4659	Jurij Mihin.....	Voronezh Russia
2:5028/0	Ivanovo Net.....	7-093-232-1044	Max Grushansky.....	Ivanovo Russia
2:5020/0	NET Moscow Russia.....	7-095-128-4661	Farid Vagapov.....	Moscow Russia
2:5050/0	Kama river net.....	7-3412-221365	Alexander Ermolaev.....	Izhevsk Russia
2:5080/0	Middle Ural NET.....	7-343-2560347	Serge Zhavoronkoff.....	Ekatereburg Russia
2:5010/0	South Ural.....	7-3512-374550	Yuri PQ.....	Russia
2:5085/0	Turkestan Net.....	7-3712-68-66-60	Vadim Zubanov.....	Tashkent Uzbekistan
2:5005/0	Toms Net.....	7-382-223-3194	Maxim Looz.....	Toms Russia
2:5000/0	West Siberian Net.....	7-383-298-3128	Andrey Vokhmianin.....	Novosibirsk Russia
2:5002/0	Altay United Group.....	7-385-224-4702	Ivan Haustov.....	Barnaul Altay
2:5090/0	Enisey River Net.....	7-391-223-5789	Roman Krasnov.....	Krasnoyarsk Russia
2:5070/0	EastSibNet.....	7-395-233-2457	Anatoly Mashaev.....	Irkutsk Russia
2:5047/0	Magadan Net.....	7-413-003-6822	Arkasha Pavlik.....	Magadan Russia
2:5040/0	Khabarovsk Net.....	7-421-233-2159	Alex Sherbakov.....	Khabarovsk Russia
2:5045/0	Vladivostok Net.....	7-423-226-8818	Alexey Yashin.....	Vladivostok Russia
2:5030/0	NorthWest Net.....	7-812-126-6972	Michael Bravo.....	St.Petersburg Russia
2:5031/0	North Net.....	7-818-001-1995	Oleg Kalyamin.....	Archangel Russia
2:5003/0	Komi Net.....	7-821-222-5587	Alexander Zuiikov.....	Syktuykar Komi
2:5015/0	NiNoNet.....	7-831-2-342022	Gennady Zvonov.....	Nizhny Novgorod Russia
2:5051/0	Simbirsk Net.....	7-8422-312813	Ugeen Koshelev.....	Simbirsk Russia



# INTERNATIONAL FIDO NETWORK

## LIST OF LOCAL NETWORK COORDINATORS

NET/NODE	NETWORK	DATA PHONE	COORDINATOR	LOCATION
2:505/0	Volga River Net .....	7-8442-75-8383	Alex Kotelnikoff .....	Volgograd Russia
2:5057/0	Samara Net .....	7-846-232-5783	Andrey Semilugov .....	Samara Russia
2:5060/0	South Russia Net .....	7-86344-63702	Lev Semets .....	Taganrog Russia
2:446/0	Georgia .....	7-8832-958235	Temuri Imnaishvili .....	Tbilisi Georgia
2:430/0	Turkiye Net .....	90-1-3809938	Bulent Sahin .....	Turkiye
2:402/0	HolyNet (02) .....	972-2-894-037	Uriel Segal .....	Jerusalem Israel
2:401/0	Tel Aviv .....	972-3-523-7299	Yaron Munz .....	Tel Aviv Israel
2:403/0	Tel Aviv (03) .....	972-3-9667561	Chaim Neuman .....	Tel Aviv Israel
2:405/0	NetWork 09 .....	972-9-919-257	Alon Gindgold .....	Ra'anana Israel

### ZONE 3 - OCEANIA

3:670/0	Tasmania .....	61-03-44-5855	Roy Austen .....	Tasmania Australia
3:713/0	Sydney West Net .....	61-2-628-8888	Darren Gibbs .....	Willmot NSW
3:712/0	SYDNEY NET .....	61-2-692-0831	Ted Harrison .....	Sydney NSW OZ
3:714/0	WARRINGAH .....	61-2-977-6820	Chris Patten .....	Sydney NSW Australia
3:635/0	Andy's Victorian Net .....	61-3-357-3414	Andrew Gulovsen .....	Hadfield Victoria Australia
3:634/0	Melbourne's Net 634 .....	61-3-509-4417	Andrew Rajcher .....	Melbourne Victoria Australia
3:636/0	Melbourne's Most Outstanding Network .....	61-3-546-3038	Wayne Burnside .....	Melbourne Vic Aust
3:632/0	Melbourne's Largest Bodacious Network .....	61-3-589-6315	Simon Gronow .....	Beaumaris VIC
3:633/0	Melbourne's Most Excellent Network :-)	61-3-752-3949	peter jelson .....	Melbourne Victoria Australia
3:711/0	SYDNEY NORTH .....	61-43-23-2275	Kevin Mann .....	Springfield NSW
3:624/0	South Coast .....	61-44-72-8251	Ian Hunter .....	Batemans Bay NSW Australia
3:622/0	Greater Newcastle .....	61-49-58-7046	Stan White .....	Newcastle NSW
3:620/0	Canberra Net .....	61-6-292-3413	Craig Gibson .....	Canberra ACT Australia
3:621/0	Southern NSW Net .....	61-60-40-1911	Ross Wheeler .....	Lavington NSW AUSTRALIA
3:623/0	NSW Country Net .....	61-68-69-1754	John Kelly .....	Peak Hill Australia
3:640/0	Northern Net .....	61-7-870-2972	Paul Marwick .....	Brisbane Qld Australia
3:800/0	SOUTH AUSTRALIAN NET .....	61-8-234-0244	A G Smith .....	FLINDERS PARK AUS-
TRALIA				
3:850/0	Opus Theta .....	61-89-87-3171	Paul Malkinson .....	Nhulunbuy NT Australia
3:890/0	The Golden State .....	61-9-244-2111	mick howland .....	Innalo WA
3:770/0	Christchurch NET .....	64-3-377-2324	John Clarke .....	CHCH NEW ZEALAND
3:771/0	Wellington NET .....	64-4-478-3117	Ewen McNeill .....	WGTN NEW ZEALAND
3:774/0	Waikato NET .....	64-7-846-6918	Barry Blackford .....	Hamilton N.Z.
3:772/0	Auckland NET .....	64-9-358-8635	Terry Bowden .....	NEW ZEALAND

### ZONE 4 - AMERICA LATINA

4:950/0	Costa Rica Net .....	506-50-2474	Gavin Smits .....	Costa Rica
4:920/0	Panama Net .....	507-23-9669	Michael Chamberlain .....	Panama City Panama
4:840/0	FidoNet-Peru .....	51-14-44-14-06	Jose Raborg .....	Lima City
4:970/0	Red Mexico Centro .....	52-3-621-9932	Gamey Garcia .....	Guadalajara Jal
4:975/0	Red Mexico DF .....	52-5-659-6958	Francisco Garuli .....	Mexico DF
4:971/0	Red Mexico Norte .....	52-83-56-4119	Arturo Garza .....	Monterrey NL
4:901/0	Net Gran Buenos Aires .....	54-1-242-4493	Efren Martin .....	Buenos Aires
4:900/0	TangoNET .....	54-1-856-5827	Nicolas Kuzminski .....	Buenos Aires CF
4:902/0	Red Provincia de Buenos Aires .....	54-21-25-7845	Cesar Ferri .....	La Plata BA
4:903/0	Red Mediterraneo .....	54-51-24-5751	Jorge Ljubic .....	Cordoba CB
4:905/0	Red Litoral .....	54-776-2-8955	Ariel Nardelli .....	Reconquista SF
4:906/0	Red Patagonia .....	54-944-23-462	Guillermo Luque .....	Patagonia
4:801/0	Rede Paulista <Brazil> .....	55-192-52-6547	Araken Salamene .....	Campinas SP
4:802/0	Rede Carioca <Brazil> .....	55-21-481-1219	Lauro Faria .....	Rio de Janeiro RJ
4:8027/0	Rede Capixaba *Brazil* .....	55-27-227-1770	Paulo Santos .....	Vitoria ES

# INTERNATIONAL FIDO NETWORK

## LIST OF LOCAL NETWORK COORDINATORS

NET/NODE	NETWORK	DATA PHONE	COORDINATOR	LOCATION
4:803/0	Rede Mineira <Brazil>	55-31-281-2925	Sergio Creimer	Belo Horizonte MG
4:804/0	Rede Parana <Brazil>	55-41-226-1834	Eduardo Wei	Curitiba PR
4:805/0	Rede Sul <Brazil>	55-51-593-3964	Fabio Becker	Novo Hamburgo RS
4:806/0	Rede Planalto <Brazil>	55-61-314-6247	Pedro Dobbin	Brasilia DF
4:807/0	Rede Baiana <Brazil>	55-71-357-0970	Carlos Strauch	Salvador BA
4:808/0	Rede Pernambuco <Brazil>	55-81-268-7682	Aloisio Mello	Recife PE
4:8083/0	Rede Paraibana <Brazil>	55-83-224-3570	George Leite	Joao Pessoa PB
4:8085/0	Rede Norte <Brazil>	55-85-261-4696	Stenio Pita	Fortaleza CE
4:880/0	Fido-Santiago	56-2-553-2570	Juan Ramirez	Santiago-Chile
4:881/0	FidoNet-Valparaiso	56-32-91-3067	Vladimiro Miranda	Valparaiso
4:850/0	Fidonet Uruguay	598-2-486616	Juan Carlos Alonso	Montevideo U
4:981/0	Red Dominicana	809-563-7274	Temistocles Bello	Santo Domingo RD

### ZONE 5 - AFRICA

5:7911/0	Tunisia	216-1-70-1827	Michael Cracknell	Tunis
5:7711/0	Senegal	221-21-7627	Moussa Fall	Dakar
5:726/0	Mauritius	230-464-1773	Michael Dewson	Reduit
5:751/0	Ethiopia	251-1-514412	Lishan Adam	Addis Ababa
5:731/0	Kenya	254-2-567043	Doug Rigby	Nairobi
5:7321/0	Uganda	256-41-532440	Charles Musisi	Kampala
5:761/0	Zambia	260-1-252892	Mark Bennett	Lusaka
5:7211/0	Zimbabwe	263-4-738692	Rob Borland	Harare
5:7001/0	Botswana	267-373461	John Case	Gaborone
5:7101/0	Transvaal	27-12-221-2345	Richard Peer	Pretoria
5:7105/0	Ors/N.Cape/W.Tvl	27-171-84102	Niel Uys	Welkom
5:7102/0	West Cape Net	27-21-58-7129	Sean White	Cape Town
5:7103/0	Natal Net	27-31-7655045	Chris Kenward	Durban
5:7104/0	Algoa Net	27-41-662491	Bryan Haelele	Port Elizabeth

### ZONE 6 - ASIA

6:609/0	MALAYSIA Net	60-3-7741771	Louis Su	MALAYSIA
6:750/0	NORTHERN MANILA NET	63-2-200-548	Tommy Ysip	Manila Philippines
6:751/0	SOUTHERN MANILA NET	63-2-732-2516	William Villanueva	Quezon City Philippines
6:754/0	Cebu Net	63-32-221-545	Jojo Sybico	Cebu City Philippines
6:600/0	SINGAPORE Net	65-2410418	Wing Lee	SINGAPORE
6:608/0	Thailand Net	662-2754966	David Hanks	Bangkok Thailand
6:730/0	FidoNet-Tokyo	81-3-3355-4395	Kazuyoshi Shinada	Tokyo
6:731/0	MIL NET	81-3117-64-6564	Steve Thomas	Atsugi Japan
6:732/0	Fidonet-Kansai	81-6-956-1160	Masato Inoue	Osaka
6:733/0	RockNet	81-6117-455290	Bill Gochncur	Okinawa Japan
6:760/0	Taehnan Net	82-333-661-3060	C. A. Rohn	Songtan (Osan AFB) Korea
6:700/0	Hong Kong Net	852-692-0831	Louie Chan	Hong Kong
6:701/0	MACAU NET	853-96-5154	Antonio Ho	MACAU
6:720/0	Taipei Net	886-2-325-7365	Lewis Wang	Taipei Taiwan
6:723/0	North TAIWAN NET	886-3-489-5383	C.H. Chur	ChungLi TAIWAN
6:724/0	Hsin Chu Net	886-3-525-5373	Tiny Lin	HsinChu TAIWAN
6:722/0	Mid TAIWAN Net	886-4-833-4885	Jhiou-hua Chiou	Yuanlin TAIWAN
6:725/0	Chiayi Net	886-5-275-4938	Chinlian Wang	Chiayi Taiwan
6:721/0	Tainan Net	886-6-782-0362	M.S. Kuo	Tainan TAIWAN
6:727/0	Kaohsiung Net	886-7-281-6473	Harry Liu	Kaohsiung TAIWAN
6:606/0	India Net	91-22-5787812	Suchit Nanda	Bombay India





# Collection 2 No Duplicates!

- Thousands of Programs
- 560 Megabytes
- Files BBS List Export
- Proprietary Librarian
- Keyword Searches
- Excellent ROM Door Utility
- Windows, Multimedia, Games
- Spring 1993 Hottest Hits
- Collection 2
- Boardwatch Special
- \$49.95 US
- Collection 1 \$24.95 US

Call 1-800-775-4232 or 918-251-7330 to place orders.  
We accept Visa, MasterCard or Check.

## SOFTWARE VAULT

A division of American Databankers Corporation

1820 South Main, Broken Arrow, OK 74012 (800) 775-4232 (918) 251-7330

## Give Your BBS the Internet Advantage!

**HoloUUCP** connects your BBS to Internet E-Mail and USENET News. With Internet E-mail you can exchange mail with people all over the world. Internet E-Mail reaches over 11 million mailboxes, including major commercial services like CompuServe and America Online.

**HoloUUCP** lets you set up your BBS system to automatically exchange mail whenever you want. Mail sent to sites directly connected to the Internet takes only minutes.

**HoloUUCP** also links your BBS to USENET News. USENET News is used by people all over the world to discuss over 4,000 topics. Topics range from arts & sciences to recreation & politics and more. HoloNet can help you expand your BBS membership by giving your users access to the news conferences they want. Over 40MB of new articles are available daily.

**HoloDNS** is an option you can have with HoloUUCP. HoloDNS provides a custom Internet address for your BBS. For example, your members would have an address like "first.last@your-BBS.com". The one time setup fee for HoloDNS is \$25.00.

**HoloUUCP** service is quick and easy to set up. To take advantage of HoloUUCP you'll need a UUCP gateway. The one time setup fee for a HoloUUCP account is \$50.00 and usage is billed at regular HoloNet rates, which are as low as \$6.00 per month.

**For more information on HoloUUCP, please call us at 510-704-0160.**

**HoloUUCP** is compatible with:  
FirstClass • Major BBS  
PC Board • Wildcat! •  
Waffle

CompuServe, America Online, FirstClass, Major BBS, PC Board and Waffle are trademarks of their respective owners.



**HoloNet**<sup>™</sup>  
From Information Access Technologies, Inc.

Information Access Technologies, Inc.  
46 Shattuck Square Suite 11  
Berkeley, CA 94704-1152

© 1993 Information Access Technologies, Inc. All Rights Reserved.

# Need Some Files for your BBS?

## Turn to.... **CDROM!**

### We Specialize in SYSOPS!

**\$49.00**  
Each

**\$39.00**  
Each

**\$29.00**  
Each

Pier Shareware #2	Pier Shareware #1	Night Owl's 7.0
Night Owl's 8.0	Premium DOS	Swimware 1993
Monster 2 Disk Set	Premium Windows	Shareware Studio II
SW Extravaganza	So Much Screenware	Star Trek/Sci Fi
<b>Any 3 For \$129</b>	<b>Any 3 For \$99</b>	<b>Any 3 for \$79</b>

Buy three disks and receive...  
**PHOENIX 3.0 FOR FREE!**

### The **MARKetplace!**

**1-800-289-1ROM**

P.O. Box 10925  
St. Louis, MO 63135



**Earn \$1416 a day  
with your own BBS!**

**BB\$**



Learn how in the **New  
PREMIERE BB\$ PROFITS**

**Video Tutorial and Starter Kit \$99.95  
or The Ultimate BB\$ Profit Kit \$499.95**

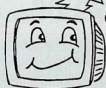
The Premiere Starter Kit includes the how-to videotape, the how-to manual, and much more! The Ultimate BB\$ Profit Kit includes The Premiere Kit, The Major BBS Professional Bulletin Board System V6.0, and the How to Write a Business Plan Program by the Small Business Institute, plus more. (includes shipping 2 day mail in the U.S.)

Add \$10.00 for C.O.D.'s. Call for shipping rates outside U.S. To order a kit call **1-800-453-8308** or to receive a FREE information packet call **DREAMWORKS 1-602-893-3988** anytime or write to Bulletin Board Profits, 5037 East Keresan, Phoenix, Arizona 85044. Visa, Mastercard, C.O.D.'s, checks, and money orders welcome.  
C.O.D.'s - money orders or cashiers checks only.

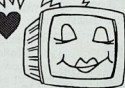


### The Meeting House BBS

(401) 848-2200 Newport  
(401) 751-1606 Providence  
(401) 624-8744 Tiverton & Fall River MA



300-9600 baud 8-N-1  
13 lines & growing  
over 50,000 files available



Online MALL  
Active CHAT membership  
Multi-player Arcade style games



**60,000 CDs ONLINE**

**WORLD'S LARGEST ONLINE  
MUSIC COMPACT DISC STORE**

DISCOUNT PRICES • FAST DELIVERY

COMPACT DISC

**Modem: 408-730-9015**

In Boston: 617-639-0238

In Chicago: 312-477-3518

In New York: 212-532-4045

CONNECTION

At any speed up to 9600 - 8 Data, No Parity, 1 Stop  
Tel.: 408-733-0801 • Fax: 408-733-0850

**Talk dirty on the...**

**Lifestyle  
B.B.S.**

Where Couples & Singles meet!!  
Swinging/B&D/S&M/Bi/TV/Fetishes  
The hottest CHAT BBS in the U.S.  
Personal Questionnaires • Hot erotic stories  
900+ calls/day with over 1,000 active members



**Modem: (516) 689-5390 • A 33 line Oracomms system**

**Log  
On  
America**

**ALWAYS  
FREE**

USA TODAY, Classified Gif files, Retail Mall, Chat online, Missing Children gif files, and much more, never a charge!!! **Win thousands in free computer equipment!!** New winner each month!  
FULL SUPPORT FOR 9600 BAUD & UNDER.

**LOG ON TODAY: 401-739-4100**





# Free CD-ROM Disc!

Demo and Test contains 350 megs of PC Shareware & PD software. Including Special CD-ROM Benchmark & Test Utilities written by our programming staff, and NOT available on any other CD-ROM Discs. Our Special Test Utilities measure throughput as well as access times in a reliable and consistent manner for a meaningful real-world benchmark for CD drives. The Disc and Interface Software are fully functional (even for BBS use) and not crippled in any way. When purchased separately Mega Demo & Test is \$14.00 plus \$6.00 for S&H - However for a Limited Time Only this Demo and Test CD-ROM Disc is Free with any CD Disc purchase.

## So what's different about PROFIT PRESS's CD-ROM Discs ... Besides Interface Software that'll Blow Your Socks Off?

All of the archive files have been read and indexed by our hypertext search engine which creates a file on the CD-ROM Disc that allows for searches on unique words and phrases. This means that the user can search the entire disc in less than 10 seconds and the search will include ALL of the documentation INSIDE the archive files. For DOS and Windows 3.1 users we provide both MegaSearch and MegaWin our Graphical Search and Retrieval Software that allows the user to view 256 Color GIF's, Animated Color FI's, play SOUND BLASTER sound files, plus view and search for text strings INSIDE the archive files, all with just one keystroke or mouse click.

All of our CD-ROM Discs are "BBS Ready" and include files.bbs, plus MegaDoor and MegaTerminal. Both programs fully support the hypersearch lookup features of MegaSearch. MegaTerminal is our "Remote BBS Graphical User Interface" for MegaDoor that allows the remote user to access MegaDoor using... Mouseable Pull-Down Menus in a Windowed Environment! Try MegaTerminal! It's unlike anything seen before on public BBS systems. You Have to See it to Believe it. Call our BBS at (602) 299-0693 or at (602) 577-9696. Select Doors from the main menu, run door #1, enter 1 to download MegaTerminal, unzip, read the short document megaterm.doc, install as instructed and experience MegaTerminal!

**Mega CD-ROM 2**  
PC Shareware Spectacular

650 Megs Over 7,000 Virus Free Files - 1 plus Gigabytes Uncompressed! Contains Sound files, 256 Color GIF's, FI's, Utilities, Programming, Bibles, True Type Fonts, WINDOWS Programs, Electronic Magazines, Communications, BBS Programs, Plus Much More! - 65% different or newer files than Mega CD-ROM 1

**Mega WinOS/2**  
Windows and OS/2 Shareware

600 Plus Megabytes Over 4,861 Virus Free Files - 1 plus Gigabytes Uncompressed! Filled With Windows and OS/2 Shareware and Public Domain Files Including Sound files, Utilities, Programming, Plus Much Much More!

**Mega A/V**  
PC Audio & Video

Over 600 Megabytes Filled With Hundreds of 256 Color .Gif's, .FI's of all types & Includes our New "Zoom-In Catalog System" with our Built In .Gif Viewer, plus Loads of Sound files, .Mod, .Rol, .Wav, & .Voc, + Utilities for Sounds & Graphics!

New Release!

**fao Gold**

For Adults Only GOLD - Just The Best of the Best - Many .Gif's are New and NOT included on FAO 123 "Gif's with No BBS Logos" Over 600 Megabytes "Wife Proof Labels" 256 Color .Gif's with resolutions up to 1280x1024, 256 Color Animated FI's, GL's, .DI's, Games, and ASCII Fantasy Text Files. We have also included our New "Zoom-In Catalog System" with our Built In .Gif Viewer, plus The FAO Series is the Only Adult CD-ROM Discs with MegaDoor and MegaTerminal plus a True MS Windows 3.1 User Interface!

**Special Introductory Price Only!**

New Release!

**\$39.00 ea.**

Red Hot! Super Special!

**fao**

For Adults Only  
3 Disc Collection

For Adults Only "Wife Proof Labels" 256 color GIF's, with resolutions up to 1280x1024, 256 Color Animated FI's, GL's, .DI's, Games, and ASCII Fantasy Text Files. - This Huge 3 Disc Collection Contains 1,892 Megabytes with Over (Count Them) 16,180 Files!

**Now, for a Limited Time Only!**  
Get all 3 of these fantastic FAO CD-ROM Discs for Only!

**\$69.00**

**Special Offer Supplies Limited!**  
**\$19.00 ea.**

**Special Offer Supplies Limited!**  
**\$29.00 ea.**

**Mega CD-ROM 1**  
PC Shareware Spectacular

650 Megs 8,036 Files. Over 1plus Gigabytes Uncompressed! Contains Sound files, 256 Color GIF's, FI's, Utilities, Programming, Bibles, True Type Fonts, WINDOWS Programs, Electronic Magazines, Communications, BBS Programs and Utilities, Plus Much Much More! Contains Many Files Intentionally Not Included on Mega CD-ROM 2 - Mastered 1/92

**SDN 1 Plus**  
600 MegaBytes

A Must Have for Everyone not just Sysops! - 600 plus Megabytes! Over 7,215 Files. Includes the SDN complete Library, SDN International is the largest not for profit author direct file distribution network in the world. Also includes WinNet - Windows Library, DVNet - DesqView Library, LanNet - Lan Library, DDS - Door Distribution System Library, SDS - Sysop Library, Digital Gamers Review OnLine Magazine, Boardwatch Magazine's Online Edition, FIDONet News, ASP Shareware, Genealogy, Cooking, Games, Graphics, and Utilities of all types, Plus Much Much More! - Mastered 6/92

**SONY Caddies \$4.75 ea. with Non Demo CD Purchase - Questions & Dealer Info. Call (602) 577-9696**

All prices are quoted in U.S. dollars, with funds drawn on U.S. banks. The prices listed above do not include shipping and handling.

PROFIT PRESS, 2956 N. Campbell Ave., Tucson, AZ 85719  
INFORMATION (602) 577-9696 - FAX (602) 577-9624



ORDERS ONLY! Call Toll Free  
**1-800-843-7990**

## STOP VIRUSES FAST

### TRANSCAN™ v4+

"The Premium File Scanner  
and Converter!"

TranScan extracts files of ALL types for Virus Scanning by ANY Scanner and Converts files to a default method. TranScan works with ALL BBS systems complete with COM output. Files can be tested for Integrity, Viruses, Age or Date, GIF Integrity & Resolution and more. Save \$5 off \$30 registration by mentioning this Ad.

To order call Toll Free

**1-800-578-3061**

or call TranScan BBS

913-266-0781



# THE FILE BANK

**"HUNDREDS of THOUSANDS of FILES!"**

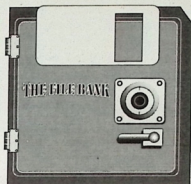
- ☞ Thousands of Quality Downloads
- ☞ Interesting Message Areas
- ☞ User Chat
- ☞ Instant Online Registration
- ☞ Extensive Adult Areas
- ☞ Online Games

**AND MUCH MORE!**

*Call Today!*

**(303) 534-4646**

**ALL MAJOR CREDIT CARDS ACCEPTED**



## ADD A GIGABYTE OF FILES TO YOUR BBS FOR FREE!

When you purchase Two BBS ready CD-ROM's from the Arsenal at the regular retail pricing, you get to choose another one for FREE!

## Put Over Four Gigs on your Board!

Pioneer DRM-600a, Interface Kit, Cabling, and Six BBS Ready Discs of your choice for \$1,100.00 plus shipping. There is no easier way to add over Four Gigabytes to your System.

NEW ITEM! NEW ITEM! NEW ITEM!

### DIGITAL DREAMS VOLUME 001

New and Original! All New Scans, No BBS Ads, and Fully BBS Ready! This is the BEST Adult BBS Ready Disc Made!

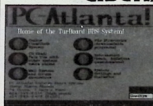


### ARSENAL COMPUTER

P. O. Box 5723, Topeka, KS 66605  
(913) 266-5851 (Voice)

# TurBoard

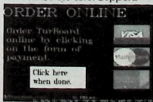
ascii/ansi/rip/naplps bbs



Real SVSOPS screens!



Full 24-bit Color Support!



Graphical Online Ordering!

As more and more bulletin board developers are realizing, the future of online communications is graphical! What better way to meet this challenge than with the best integrator of all the new technology:

## TurBoard!

With TurBoard, you can include graphics from the simple RIP protocol all the way to the highly advanced, high resolution and machine independent NAPLPS protocol!

NAPLPS animation will come alive RIGHT BEFORE YOUR EYES, as the system operator can view the graphics in REAL TIME, as the user sees them!

You are not limited in your users as there is client software so Macintosh, Amiga and IBM (LCD, CGA, EGA, VGA, 256 SVGA, etc) can all access your entire GRAPHICAL service!

**See our booth at ONE BBSCON!**

### TeleMedia

P.O. Box 566491

Atlanta, GA 31156

404/395-6525 voice

404/395-6327 data - v.32bis, HST

404/395-6326 data - 2400 bps

### pricing

1-2 NODES	\$75.00
3-5 NODES	\$149.00
6-15 NODES	\$299.00
UNLIMITED	\$379.00

MasterCard, VISA or money order



# TURNING TBBS POSSIBILITIES INTO... REALITIES!

Advanced Systems Research, authors and distributes a complete line of applications specifically designed to enable you to exploit all the possibilities of eSoft's powerful TBBS BBS software. We are pleased to offer full support for all the software we distribute.



**We carry the complete line of eSoft programs**

## SUPERCHAT

So many have asked for this one. This is a complete TBBS conference system replacement. Pulling features from Major BBS and DLX this system will not leave you wanting for features. Yes now you can even browse another user while in chat! And we have even put in a few unique features just to insure that TBBS will now have the best chat system...BAR NONE!

## FILEMAN

At \$119.00, Fileman is the most complete and easy to use file management system for TBBS. With features that include FileOp designation, point and tag file selection, online file description edit, 1024 character descriptions, script file downloading, WULI, ratio enforcement, d/f, file calculations, Disk Space Information, usage log tracking and much much more! Now with ONLINE GIF PREVIEWING and ONLINE ARCHIVE FILE EXTRACTION. User can extract files from an archive, and tag only those files that they wish to d/f, or they can view docs and readme files from the archive while on-line! New-Automated virus scan and zip comment removal/replacement on uploads!

Also, with enhancements for the Copy-III module for CD-ROM and DISK LAN based systems. This allows CD-ROM Access with ZERO TBBS impact on LAN based systems. Supports 65 lines and 10 tasks. Fileman now supports CD-ROM carousels and sit-packs. Fileman also has enhancements for Topeman Online Tape Backup system.

Some options require LAN setup, and Copy-III software.

## COPY-IT!

At \$109.00, Copy-III is an option that allows CD-ROM and DISC SERVER operations on a LAN. Use Copy-III with FileMon for GIF preview and Zero Impact! File Transfer. Use With Topeman for Disc Backups without taking down the board! Copy-III can handle 65 lines with 10 concurrent tasks! Copy-III also has timed and real time event processing for TMS 1.1 and TIC

ASR's FILEMAN/COPY-III combination is the only system to directly support the PIONEER DRM-600 CD-ROM 6 Disc Changer. The DRM-600 is available from ASR at only \$938.00 complete with shipping.

**UTILIZE the FULL POTENTIAL of TBBS!**

**ALSO AVAILABLE FROM**

**ASR**

**TPOSS** A total sales management system

**CLASS ADS**

Classified Advertisement Program

**PROFMAN**

Browse users profiles. Can be used from within Super Chat



**CHAT JACK**

Multi-Player Blackjack Game with Chat

## SYSMON

At \$79.00 SYSMON is a realtime remote control system designed to look and work just like the TBBS 2.2 console. SYSMON can be configured to handle up to 65 lines including the console. SYSMON can also be used by your regular callers as a system overview and alarm watch system. Many features including complete system usage logging, TBBS application launcher and a duplicate user logging and drop. Version 4.1 now supports EGA43 line mode to display all 65 lines on screen at once.

NOW WITH DROP CARRIER DETECT

## GotoCommand

At \$72.00 GotoCommand is an amazingly configurable menu jump system. This program has a wonderful interface that can be used by ANSI, ASCII and the new RIP protocol. Give your users a single command to jump to any feature, ANYWHERE ON YOUR BOARD! Each command can be configured to any SDL style authorization. Commands can be made universal, or local to a single menu. GotoCommand also has the most unique queueable ability of any program on the market. Now make ANIMATED ANSI a part of your menu. GotoCommand also works with LiveWire to allow random messages at each menu. GotoCommand works in conjunction with TBBS hot keys, but allows your callers to use multiple key options.

## BULLETS

At \$52.00 Bullets is a highly configurable bulletin display and management system. Bullets is complete with bulletin display by authorization, configurable colors, bulletin list display for bulletins that are grouped together. Autodisplay modes, forced read and read once modes, and online bulletin configuration. Bullets will even allow you to attach files for downloading, and will execute any valid TBBS SDL entry as a bulletin entry.

**This is just a small listing of available software...  
CALL ASR FOR A FULL CATALOG**

## USER MANAGER II

At \$69.95 User Manager is a complete system user management facility. It automatically adjusts user authorizations based on user subscriptions via credit cards, tracks expiration dates and displays reminders at Sysop determined intervals and automatically updates user information. User Manager has a user profile section that allows keyword lookup, top ten lists, etc.

**Call the Advanced Systems 32 Line BBS and SEE FOR YOURSELF!**

**(702) 334-3317**

or contact us for further information...  
1475 Terminal Way, Bldg. C-2  
Reno Nevada 89502  
or call... (702) 334-3304

**ADVANCED<sup>®</sup> SYSTEMS  
RESEARCH**  
Employing Science and Technology

# Need freedom from BBS LOCKUPS?



If you are serious about your BBS, we are serious about keeping it online. The Computer Sentinel is an intelligent microprocessor device which automatically monitors your BBS and restarts your BBS when a lockup occurs. No need to call the BBS to fix it; with the Computer Sentinel, your callers do that for you.

No TSRs or motherboard slots required. The Computer Sentinel is a stand-alone device which connects between the external modem and your BBS computer. It can electrically press your computer's reset switch, or it can cycle power using optional power control modules. Designed for all lockup conditions, including off-hook lockups.

Daily EVENT activities can be monitored for lockup conditions. We now offer three models, to meet your technical requirements. Support is provided for Multiple nodes, Multitasking, LANs, Multi-port cards, and X.25 PADs. Protect your BBS 24hrs a day.

Access Solutions Corporation - 18 Ivy Lane - Cherry Hill, NJ 08002  
Orders & Info: (609) 667-7628 - BBS (609) 667-5652

## COMPUTER SENTINEL

## THE 'INFAMOUS' GaRBaGe DuMP™



- ☺ Adult Realtime Chat
- ☺ "Let's Get Personal" Dating Directory
- ✉ Adult Message Areas
- ✉ Private E-mail
- ☑ National Net Mail
- ☑ Multi-Player Games
- 📁 ASP File Library
- 🖨 PC-Catalog

☎ Nationwide Local Access - Low as \$2/Hr

### 505-294-5675

2400  
SN1

To find your Local Access Number Online - For Voice Support - 505-294-4980

**DataSafe Publications, Inc**  
PO Box 16032, Albuquerque, NM 87191-6032

## VisaManTF

Point-of-Sale Dial Module  
for The MajorBBS 6.03

VisaManTF is the ONLY Point-of-Sale Dial module designed to operate w/The MajorBBS and certified for operation with the Teleflora CreditLine Program.

VisaManTF operates online, automatically, 24 hours a day retrieving Credit Card approvals before posting user purchases.

VisaManTF operates on either subscription or credit-based systems and provides email receipts to the user and sysop.

Requires:

- Teleflora CreditLine Merchant Account
- MajorBBS 6.03 or later

### \$349

"See Us at Our Booth at One  
BBSCON '93"

505-294-4980 Voice  
505-294-5675 BBS



# **Remote Access® 2.0 Professional Edition.**

**All things to all people.**

**For more information on the most flexible bulletin board system you will ever use, call 1-800-648-9800**

**wantree**  
**DEVELOPMENT®**

108 West 3rd Street Bonner Springs Kansas 66012  
(913) 441 - 1336 Fax (913) 441 - 0442 BBS (913) 441 - 0595

# BBS Software & Hardware

## *This Month's Advertised Specials*

The Major BBS 6.1, 2-user .....	\$209
The Major BBS 6.1, 8-user .....	CALL
MBBS RIPscrip Add-on .....	CALL
MBBS Fax/Online Add-on .....	CALL
MBBS Entertainment Collection .....	\$219
Wildcat! Single Line BBS .....	\$ 99
Wildcat! 1-10 Line BBS .....	\$199
Online Blackjack/Hangman Doors .....	CALL
DigiBoard 8 Port Comm. Card .....	\$449
TBBS 2.2, 2-user .....	\$219

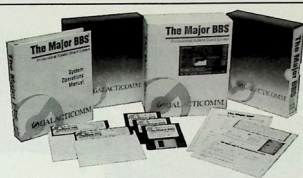
*Call our BBS at 209-222-0227 for latest product information and to download our complete catalog!*

Featuring... The Major BBS • Wildcat! • DigiBoard • CD-Discs  
Door Software • TBBS • Searchlight • and more!

## **BBS Technologies**

For orders/info call 209-222-0733 today!

1444 E. Brown Ave., Fresno, CA 93704



### **New! Version 6.1 of The Major BBS**

This latest version now supports "doors" to a second machine, multi-lingual/multi-protocol support for easy use of RIPscrip graphics, better messaging, and more! The Major BBS is the only BBS that supports up to 256 simultaneous users on a single machine, direct X.25 and LAN access, and plug-in DLL add-ons. You can expand the system with online fax services, databases, order entry, Internet access, a C developer's toolkit, and one of the hottest multi-player entertainment in the industry. A new RIPscrip add-on includes an integrated RIPaint and a complete out-of-the-box graphics interface! CALL!

## Plug into the Internet!

HoloNet links you to the **Internet** - the world's largest and fastest growing interactive network. To have *full* access to the **Internet**, all you need is a modem and HoloNet membership.

The **Internet** puts a wealth of information and services at your fingertips for your business and personal needs -- Send electronic mail to businesses and other Internet users with Internet E-Mail. Transfer and download files from other computers on the Internet using Internet FTP. Talk to people all over the world with Internet Relay Chat. Play games with people across the country with Internet Chess, Go and MUDES.

The **Internet** is a valuable source for information and worldwide communications. **HoloNet** provides easy access to the Internet.

**HoloNet** is a local call in over 850 cities nationwide. Try it for yourself and find out what the **Internet** is all about.

For a **free** demo modem to  
**1-800-NET-HOLO** (8N1)



**HoloNet**<sup>SM</sup>  
From Information Access Technologies, Inc.



# WILDCAT! IM — The intelligent alternative.

## Is it really this easy?

THE ANSWER IS YES!



### You can have it all with WILDCAT! IM

Why give up speed, power and flexibility just to run a multi-user BBS? Why pay high add-on prices for the kind of features you have a right to expect in a professional BBS program? Why pay thousands extra for software only a programmer can understand?

WILDCAT! IM easily handles up to eight high speed modem lines on a 486 PC using an intelligent Digiboard card, with no noticeable slowdown in performance. Add one or more eight-line workstations to your LAN, and you have a fully network-compatible multi-user BBS with local logins, without having to spend, spend, and spend again.

### Yes, We Do Doors

With WILDCAT! IM, you're not tied to proprietary modules that cost a lot but might not fit your needs. You're not locked in to buying source code or special compilers and libraries if you want to use serious business applications instead of space monster games. And you're not stuck with kludges that require you to have additional PCs networked to your BBS, just to run doors and DOS applications.

That's because WILDCAT! IM lets you run off-the-shelf applications as ordinary menu selections. We even give you a customized version of DOORWAY — to add Digiboard compatible COMI/O routines to your favorite DOS applications.

### Yes, We Do E-Mail

Whether you need local or wide-area messaging, whether you want shared public conference mail or point-to-point E-Mail, WILDCAT! IM can help you do it. Whether you need a simple QWK-compatible network, or our optional MHS gateway, WILDCAT! IM helps you move the mail.

### Yes, We Do LAN Sessions

You don't have to pay hundreds extra just for add-ons to let your LAN users log into the BBS. WILDCAT! IM was designed for LAN compatibility from the start. It's this simple: install WILDCAT! IM on any network drive. Then run WILDCAT! BBS from the DOS prompt at any workstation on the network. Full functionality, including file uploads and downloads across the LAN. Up to 250 simultaneous sessions in any combination of local LAN logins and modem connections. Why do it any other way?

### Yes, We Do RIP

RIP (Remote Imaging Protocol) graphics come standard with WILDCAT! IM. Users can select menu commands with the mouse, and see graphics comparable to or better than those found on Prodigy or America Online. And we don't make your users give up their favorite professional communications software, either. RIP graphics are fully supported by QmodemPro.

### Yes, We Do CD-ROM

Of all the new computer hardware developments of the last decade, none have had more impact on the BBS world than CD-ROM technology. CD-ROMs are a perfect way to add huge numbers of files to your BBS. Instead of making you use third-party doors or expensive add-on modules to support a CD-ROM, WILDCAT! IM treats it just like another hard drive, showing the CD-ROM files as part of your regular file download areas.

## What are you waiting for?

Got a question? Call us toll free at

# 800-999-9619



Mustang Software, Inc.  
P.O. Box 2264, Bakersfield, CA 93303  
(805) 395-0223  
Fax (805) 395-0713  
BBS (805) 395-0650

Redefining Telecommunications In '93

## PRIME

PreRapture International Message Exchange

The sun never sets on the PRIME NETWORK™  
**America, Europe, Asia**

The only worldwide  
Christian Network on Earth!

Featuring Wholesome Echoes  
and Files for Christians  
and  
those not Religiously Inclined.

Support for Home Schooling  
and Education.

FREE BIBLE to Download  
or USE ONLINE  
**(919)286-3606**  
**(919)286-3266**  
**(919)286-3962**

Using USRobotics DHST MODEMS  
on All Lines. A Non-Profit Organization  
with NO CHARGE for BBS Access  
or Membership

## MAKE EXTRA \$\$\$ MONEY WHILE AT HOME WITH YOUR OWN P.C. & MODEM !!!

Dependable people who have their  
own computer and modem needed.  
Normal, handicapped, and the disabled  
are welcome. Successful  
candidates will be



able to prove their  
ability to access  
the largest number  
of BBS's  
possible (provide  
spreadsheet and  
verification).

Need more details?

Call Today (713) 973-6306 • 24 Hrs.

Blast off with

## Infinite Space

Connecting you with the world

And Beyond....

32 Lines Live Chat

P C Pursuitable

Multiplayer Games

New Contests with

Prizes Every Week

5 Gigs of Files

(407) 850-2404 Voice

(407) 856-0021 Modem

## Choosing your BBS software vendor doesn't have to be a "coin-toss".



- The lowest prices, anywhere!!
- ALL major brands of software and hardware!!
- Money-Back Guarantee on all purchases!!
- All Major Credit Cards Accepted!!
- C.O.D./Company Purchase Orders!!

## The INDEX System™

6030 East Alabama Road, Suite 114 - Woodstock, Georgia 30188 - (404) 924-8667

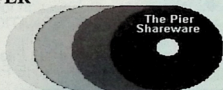
telecommunications solutions - hardware - software - training - support

## The Only CD-ROM HOTTER and More CURRENT than The Pier Shareware CD-ROM #1 Is The Pier Shareware CD-ROM #2

### SPECIAL TWO DISC OFFER

The Pier Shareware CD-ROM #1  
The Pier Shareware CD-ROM #2

Two Disc Set For ONLY  
**\$59.00**



#### The Pier Shareware CD-ROM #2 Features

- All files truly dated 1992 - 1993  
(Smart Date Checking in place)
- Over 660 Megs of Shareware files
- The Pier file retrieval software (easy file access)
- All files are free of viruses (tested with McAfee SCAN)
- Full GAP, PCboard, Spiffire, Wildcat! BBS support  
Remote Access FILES.BBS

#### Disc Sold Separately

The Pier Shareware CD-ROM #1 - \$29.00

The Pier Shareware CD-ROM #2 - \$39.00

Please add \$5.00 for shipping and handling (\$8.00 for  
overseas orders). We now accept all major credit cards,  
Check, and Money Order. Check and Money Order must  
be in US funds and drawn on US banks. Make Check  
payable to: The Pier Exchange, 128 Carmel Rd., Buffalo,  
New York 14214.

BBS (716)875-3130 16.8 HST Dual  
Information or FAX (716)875-4931



ORDER **1-800-438-9734**  
30 Day Money Back Guarantee

#### Subjects

Windows Applications  
Windows Games  
Programming Languages  
Programming Tools  
SVGA GIF Pictures  
Education Programs  
Games / Entertainment  
Sound Blaster/MIDI  
DTP/Clipart  
Bible  
Medical/Health  
Word Processing  
LaserPrinter Utilities  
BBS Programs/Doors  
Communications  
Legal  
OS/2 Programs/Utilities  
And Much More!

VISA



# Meet the Monster...



## Hackers World BBS Over 16 Gigabytes of Files...

- ◆ 24 Inbound high speed lines supporting 1200-38, baud rates, V32b / V42bis- including 5 HST D/S.
- ◆ World-Wide Connection for Echomail through FIDONET and ADULTNET "OVER 300 NATIONAL & INTERNATIONAL CONFERENCES"
- ◆ Connection to over 30 File Distribution Networks...Bringing you the LATEST in PUBLIC DOMAIN/SHAREWARE FILES!!!
- ◆ Unlimited Downloads with NO upload/download ratios...
- ◆ USA Today Online News Service, Featuring the latest International and National news and regional weather and sports...
- ◆ Serving the Online BBS community since 1988...

**CALL TODAY and subscribe to one of the LARGEST and FASTEST GROWING Bulletin Board Services in the U.S. Today. THERE ARE NO "HIDDEN CHARGES OR ADDITIONAL FEES" to use any of the services on "The Monster"**

**Hackers World BBS**

VOICE - (309) 672-4406 DATA LINES - (309) 672-4405 V32B, V42B 14,400 BPS  
(309) - 672-4447 USR HST DUAL STANDARDS  
Mastercard & Visa as well as Personal Checks Gladly Accepted  
*Fees Based on Annual or Semi Annual Rate*

## ADULT/SHAREWARE CD - ROMS

*Ecstasy Hot Pics	\$59	24 hrs	*Seedy Rom 7th Heaven	\$49
*Adult Reference Library	\$59	7 days	*Sextasy Busty Babes	\$59
*Digital Dreams	\$69	Visa	*So Much Shareware	\$59
*Manpower (gay)	\$69	MC	*Storm 1, 2, 3	\$39, \$49, \$59
*My Pnt. Collec. 1or 2	\$59	Discover	Night Owl 8, 9	\$39, \$49
*Nix Pix Hot Pix 1	\$89	Amex	Shwre. Extravaganza (4 CDs)	\$79
*Nix Pix Hot Pix 2,3,4,5	\$59	CCD	Shareware Studio	\$39
*PC Pix 1, 2 or 3	\$59	Check	Windows '93	\$49
*Pixure ROM Trip (3CDs)	\$109	Money	Pork - Ware	\$59
*Seedy Rom 6 Pack	\$199	order!		

**Goosebump Graphics**  
Box 5167 Mentor Ohio 44061

Free Shipping, Next Day, Air Mail, WORLDWIDE

(216) 254-2609 Voice \*MUST State  
(216) 254-1206 Fax age Over 21

"Best BBS on the planet."

# Channel 1®

Over 3,000,000 calls!

**617-354-5776** 2400 - 14.4 v.32bis

PO Box 338, Cambridge, MA 02238

## Run Your Own Chat BBS!

With DLX software, it's fun and easy to have your own social board. Some do it as a hobby, some make a living from it. Both group chat & one-on-one chatting. Up to 32 telephone lines with one PC. Email and downloading, too.

For DLX info:

818-894-4150



## DIGI BOARDS™

PC/8 - \$415\* • PC/8i - \$785\*

DB25 cable \$65 • Diagnostic kit \$65 • Daisy Chainer FREE!

(We sell every DigiBoard™ product available - call or fax for quote)

2400/9600/14.4 modems • VISA/MC COD CASH/ \*PLUS SHIPPING

**DLX**  
chat BBS  
9 lines \$595  
16 lines \$795

**BRAD THEISSEN**

1-800-821-5456 • 1-800-624-1954 FAX

SERVING THE BBS INDUSTRY NATIONWIDE

# WILD CAT

## RELEASE IIIa

### THE OPTICAL BBS™

Formerly Wildcat Gold

Over 6000 shareware programs!  
The best BBS-ready CD-ROM has just  
gotten better with our new quarterly  
subscription service! Ask for details.

SAVE

# 35%

With Subscription

To order, or for more information about  
**wcg** and our other CD-ROM titles,  
call toll free: (in the U.S.A.)

## 1-800-279-6099





## BOARDWATCH LIST OF BBS LIST KEEPERS

*This listing comprises a list of those who compile and maintain lists of bulletin boards, either by topical category, or by some geographic area or definition - often by area code. The primary bulletin board system where the list can be downloaded electronically is also included.*

BBS LIST TOPIC	LIST AUTHOR/EDITOR	CONTACT BBS	TELEPHONE
Republic of South Africa	Henk Wolsink	Catalyst BBS	(041)34-1122
BBS With Handicapped Focus	Bill McGarry	Handicap News BBS	(203)337-1607
Connecticut AC 203	Kevin Brook	Creative Edge BBS	(203)743-4044
Seattle AC 206/West Washington	Bob Dinse/Nanook	Eskimo North	(206)367-3837
Tacoma Washington AC 206	Richard Langsford	AmoCat BBS	(206)566-1155
Autocad Related BBS	Jason Osgood	SAUG BBS	(206)644-7115
Kitsap County Washington	Michael Schuyler	Quicksilver BBS	(206)780-2011
Astronomy/Space BBS	John Pickens	Starbase III BBS	(209)432-2487
Central California AC 209	Jack Porter/Madera UG	Zen Den Systems	(209)675-8436
Graphical User Interface BBS	David Shapiro	The Goocy (GUI) BBS	(212)876-5885
Southern California	Mike Hefferman	SOCAL Corner	(213)422-7942
96 List - 9600+bps BBS	Ken Sukimoto	Downtown BBS	(213)484-0260
Open Access UNIX Site List	Phil Eschallier	LGPN1 (login:BBS)	(215)348-9727
Pennsylvania AC 215/609/302	Ron Brandt	DSC/VOICENET	(215)443-9434
Cleveland Area 216	Eric Rickin	Wine Cellar	(216)382-2558
Conservation/Nature BBS List	D.Wendling/JS Christianso	Coin of the Realm	(301)585-6697
Ham/Amateur Radio BBS	Stan Staten	3WINKs BBS	(301)590-9629
Handicapped Issues BBS	Richard Barth	HEX BBS	(301)593-7357
Desktop Publishing BBS	Frank Atlee	Infinite Perspective	(301)924-0398
Medical Issues BBS	Edward Del Grosso	Black Bag	(302)994-3772
South Florida Area 305/407	Eric Thav	Silicon Beach BBS	(305)474-6512
California AC 310	Him Walton	Illusions BBS	(310)804-3324
Detroit Area 313	Jorst Mann	Tony's Corner	(313)754-1131
St. Louis AC 314	Beth Brooks	Fire Escape's Dir	(314)741-9505
ASP BBS Member List	Bob Ostrander	PBS-BBS	(317)856-2087
Engineering Related BBS	Arthur Petzelka	Computer Plumber	(319)337-6723
Rhode Island Area 401	Mike Labbe	Eagle's Nest	(401)732-5292
Atlanta Area 404	Online Atlanta Society	OASIS	(404)627-2662
Atlanta Area 404	Rodney Aloia	INDEX System	(404)924-8472
Orlando Florida AC 407	Matt Drury	London BBS	(407)895-1335
Baltimore Area 410	Brad Blase	Network BBS	(410)247-3797
Pittsburgh AC 412	Chas Stokes	Quad-Tech Systems	(412)262-4794
National BBS List	DP McIntire/Beth Spotts	Ameriboard	(412)349-6862
Milwaukee Area 414	Jay Jadofsky	Priplanus	(414)442-0170
Arkansas Area 501	Bob Underdown	The Gaslight BBS	(501)444-8420
Louisville KY AC 502		Old Soldier's Home	(502)942-2848
Ker tucky AC (502)	Dan Elder	National Data Exchg	(502)942-2848
Portland Oregon BBS	Lisa Gronke	DawGone Disgusted	(503)297-9145
New Orleans BBS List	Jeff Jones	Southern Star BBS	(504)885-5928
Worcester MA AC (508)	Jim Metzler	Miwok Village BBS	(508)754-6512

BBS LIST TOPIC	LIST AUTHOR/EDITOR	CONTACT BBS	TELEPHONE
Austin Area BBS List AC 512	Gordon L. Harlan	--ACE*BBS--	(512)258-9553
Selected BBS	Joseph Caplinger & Son	J&J's BBS	(513)236-1229
List of Gay/Lesbian BBS	Eric Blair	S-TEK BBS	(514)597-2409
AC 516 Free Shareware BBS	Harold Stein	Long Island Exchange	(516)385-7882
Area Code 517 - Mid-Michigan	Rick Rosinski/SAMM	Wolverine BBS	(517)695-9952
Business/Professional BBS	Dennis Hauser	Delight The Customer	(517)797-3740
Phoenix AC (602)	John Mendivil	Majestic Royalty BBS	(602)278-1651
Phoenix AC (602)	Sue Widemark	Cheese Whiz BBS	(602)279-0793
Wisconsin 608		JW-PC Dataflex.HST	(608)837-1923
New Jersey AC 609	Dave Schubert	The Casino PCBoard	(609)561-3377
New Jersey Area 201/609/908	Wayne R. Morton	Praedo BBS	(609)953-0769
Minnesota Twin Cities AC 612	Barry Watson	Abiogenetic BBS	(612)489-7983
San Diego, CA AC 619	Ron Dipold	ComputerEdge	(619)573-1675
San Diego AC 619	Joe Nicholson	General Alarm	(619)669-0385
Apple II BBS with Internet con	Morgan Davis	pro-sol	(619)670-5379
Virginia AC 703/804	Scott Dickinson	TOSOR BBS	(703)366-4620
OS/2 BBS Systems	Pete Norloff	OS2/Shareware BBS	(703)385-4325
Washington DC BBS List	Mike Focke	Interconnect	(703)425-2505
Geneology Related BBS	Richard A. Pence	NGS-CIG	(703)528-2612
Ontario Area 705	Alex Draper	Cottage Country BBS	(705)835-6192
Black Run/Oriented BBS	Arthur "Rambo" McGee	BDPA BAC BBS	(707)552-3314
Chicago	Paul Chartraw	The Hideaway BBS	(708)748-1911
Airline Pilot/JUMPSEAT BBSs	Rex Chadwell	ChicAAGO Hangar	(708)980-1613
Houston Area 713	David E. Wachenschwanz	Atomic Cafe BBS	(713)530-8875
Rochester NY AC 716	Tracy Logan	Logan's Run	(716)256-2659
National 800 Number BBS List	Michael Long	Hayes Online	(800)874-2937
CompuCom Modem BBS List	Thomas Weathers	Referral Market BBS	(803)297-4395
Macintosh BBS	Bill Taylor	Fort Mill Tabby	(803)548-0900
Ecology/Conservation BBS	Bob Chapman	EarthArt BBS	(803)552-4389
Wildcat! BBS	Jim Harer	Wildcat! HQ	(805)395-0650
Central California Area 805	Larry Honore	His Board	(805)652-1478
Technical Support BBS List	Gary Barr	Digicom BBS	(812)479-1310
Pinellas/Tampa Florida AC 813	Emery Mandel	Mercury Opus	(813)321-0734
Kansas City Area 816/913	Roy Timberman	Sound Advice	(816)436-4516
Dallas/Ft Worth Area 214/817	Mark Robbins	Second Sanctum	(817)784-1178
Occult BBS	Phil Hansford	Mysteria	(818)353-8891
Commodore 64/128/Amiga BBS	John Rigali	Night Gallery	(818)448-8529
National Adult BBS List	Clayton Manson	Titan BBS 1:3612/140	(904)476-1270
Alaska AC 907	Patti Johnson	Alaska Pirate Soc.	(907)562-1854
Darwin National USBBS List	Bob Breedlove	Bob's BBS	(916)929-7511
OS/2 Related BBS	Dave Fisher	LiveNet 1:170/110	(918)481-5715
Tulsa Oklahoma Area BBS List	Linda Hargraves	ACCESS AMERICA	(918)747-2542
Raleigh NC Area Code 919	Mike Stroud	Micro Message Svc.	(919)779-6674
U.S.S.R. BBS List	Serge Terekhov	Court Crimson King	7-3832-356722



# the funhouse

804 442-5867



**Original Software  
Original Printer Art  
Original Conferences  
Original GIFS  
Original Sounds  
Original FUN!!**

**The most ORIGINAL BBS in the WORLD!**

## STB 4-COM Card \$119

4 port, 16 bit, serial I/O card, Provides  
4 high performance RS-232  
Asynchronous Serial Communications  
Ports, Each on a separate IRQ or  
Allows sharing one or more IRQs.

### U.S. Robotics Authorized Reseller

USR Sportster V.32bis FAX Modem  
Internal - \$189 External - \$210

USR Courier 14400 V.32bis FAX Modem  
Internal - \$375 External - \$419

USR 16800 Dual Standard FAX Modem  
Internal - \$719 External - \$759

**Send Check or Money Order for \$119.00 (U.S.)**  
NC Residents add 6% sales tax

Visa & MasterCard  
Welcome

\*Price includes  
UPS Shipping  
to  
U.S. or Canada

to: PreRapture Solutions

1806 Albany St. Durham, NC 27705-3134

1-800-SELLCOM (735-5266) Ext. 29 orders only

Outside U.S. Call: 919-286-1502 Ext. 40

# USA BBS



**THE BIGGEST BBS  
IN ARKANSAS!**

Many Online Games -- Multiple Message Areas -- Conference Areas  
Online Magazines -- Online Store

Special Areas including Business, Adult, Religion & Kids

Monthly Contests including **FREE v.32bis Modems and MORE!**

**Call 501-753-8575 for a FREE Preview!**

(U.S.A. BBS in El Dorado, AR -- 501-863-0311)



**INSTANT online registration with major credit cards.**

**MORE THAN  
10.2  
GIGABYTES!  
16 LINES  
--- all v.32bis!**

# BOARDWATCH MAGAZINE

## Classified Electronic Bulletin Board Advertisements

Advertise your electronic bulletin board/online information service in **Boardwatch Magazine**. Let our readers know who you are and what you're doing with on-line technology. To order a BBS ad in the Boardwatch Classified BBS ad section, call the Boardwatch BBS at (303) 973-4222 and use our online ad entry system. In addition to standard list information, enter up to 255 characters of text describing your online service. - all for \$25 per month. Master Card or Visa only.

**Binary InfoNet (201)617-8054** Union City New Jersey since 12/89. Sysop: George Eplich. Using WildCat 3.601 with 8 lines on MS-DOS 80486 with 8100 MB storage. U.S. Robotics at 14400 bps. No fee. ULTRA friendly sysop that will go out of their way to help you. With over 40,000 files, over 150 echomail areas & MANY online games. You can't go wrong! Over 10,000 ADULT files to choose from. Enjoy the BBS that users call the ALL-IN-ONE BBS!

**Chat Chalet (201)791-8850** Saddle Brook New Jersey since 04/91. Sysop: Ron Meier. Using Major BBS 6.11 with 20 lines on MS-DOS 80486 with 877 MB storage. Practical at 14400 bps. \$20.25 Hourly fee. Chat Sysop. Send us your picture we will make it a GIF and put it on the BBS for all to see. "Where New Friends Meet"

**BEACON STUDIOS BBS (201)863-5253** Union City New Jersey since 01/93. Sysop: Conrad Koblack. Using Major BBS 6.11 with 8 lines on MS-DOS 80486 with 3300 MB storage. Supra at 14400 bps. \$.50 Hourly fee. Free downloads on your first call, or sign up for extra time thru 1-900 call, or VISAMC. Download from our extensive Trains, Aircraft, Cars, Wildlife, and Art libraries. Plus on-line games. Chat-Link hooks up 2 hrs nightly with BBS users around the USA

**Jezebel's Parlour BBS (201)927-2932** Flanders New Jersey since 04/92. Sysop: Beverly Delisa. Using TBBS 2.2 with 12 lines on MS-DOS 80386 with 120 MB storage. U.S. Robotics at 9600 bps. \$50.00 Annual fee. Over 7 gigabytes of files, including adult graphics. New in-house scanned GIF files added each week. Online games and databases, user to user chat, conference areas, and adult matchmaking. The BBS with the feminine touch!

**SDN International(sm) (203)634-0370** Meriden Connecticut since 01/89. Sysop: Ray Kaliss. Using Maximus 2.01w with 1 line on OS/2 80386 with 500 MB storage. U.S. Robotics at 4400 bps. No fee. Home of The Shareware Distribution Network. Contact board for shareware authors desiring international distribution of their products. Sysop information available. International File Distribution Cooperative (IFDC) Gateway. Author's invited.

**The Download Area BBS (203)676-1708** Farmington Connecticut since 09/88. Sysop: Eric Knight. Using RMS 17.4 with 6 lines on MS-DOS 80386 with 1200 MB storage. U.S. Robotics at 14400 bps. \$10 one-time fee. Named one of TOP FIVE BBS in United States; "Pournelle's Pick" in Jerry Pournelle's new book! "BBS OF THE MONTH" in Computer Shopper. 40,000 files online including all PC-SIG Users from 35 countries! FREE international messaging! FUN!

**The Wings BBS (206)876-6735** Port Orchard Washington since 04/86. Sysop: Bill Velez. Using PCBoard 14.5a with 3 lines on MS-DOS 80386 with 50000 MB storage. U.S. Robotics at 57600 bps. \$25 Annual fee. 3 lines on USB modems, Node 1 rings down to other 2 nodes. RIME! Over 5 Gigabytes ONLINE! This system has been online for over 6 years. ALL files are newer than 1988 Updated on a regular basis. Lots of 1992 files. A FAMILY BBS! NO adult!

**Exxtasy Adult BBS (209)962-4045** Pine Mt. Lake California since 04/86. Sysop: Victoria Cummings. Using Major BBS 6.0 with 4 lines on MS-DOS 80486 with 2000 MB storage. U.S. Robotics at 9600 bps. \$25 Annual fee. Large Hi-Rez Adult File collection with over 5,000 erotic files. NEW MEMBER BONUS - FREE Adult XXX VHS Video Tape with each membership. Additional features include on-line games, Graffiti wall, CHAT, Sig's, Classified's and more. VISAMC accepted online.

**Real Exposure (212)691-2679** New York City New York since 12/92. Sysop: Joey Havlock. Using WildCat 3.6 with 4 lines on MS-DOS 80486 with 2000 MB storage. Practical Peripherals at 14400 bps. \$40 & 6 Months fee. EXPOSE YOURSELF to cutting edge message base for 21st Century. Sports, Art, Politics, Entertainment, Fido, AuthorNet, PrideNet, GreenPeace, AdultNet, KinkNet, PD Files, Clipart, Demos & GIFS

### PCBOARD BBS OPERATORS

Clark Development Company, Inc., developer of PCBOARD BBS Software, has made a standing offer to pay 50% of the cost of classified advertisements in *Boardwatch Magazine* placed by any BBS that notes their use of PCBOARD 14.5a or later software. Your cost for an ad here: \$12.50

**COMPUTERS & DREAMS BBS (212)888-6565** New York New York since 01/91. Sysop: William P. Stewart. Using PCBoard 15 with 10 lines on MS-DOS 80486 with 2600 MB storage. U.S. Robotics at 57600 bps. No fee. NEW YORK CITY'S BEST BBS! Call and find out for yourself! Access is FREE! Graphical interface. DOZENS of GAMES. Thousands of FILES, Great CHATTING, PRIZES, and an Adult Area. We echo mail in RIME and Threbnest. Soon to have INTERNET. PCPursuit: NYNYO

**The Liberty BBS (212)732-2300** Los Angeles California since 07/92. Sysop: John Galt. Using Major BBS 6.03 with 58 lines on MS-DOS 80486 with 5420 MB storage. U.S. Robotics at 2400 bps. \$10 Hourly fee. PC-Pursuable at DIC/AN/24 ATD/3967777, local access numbers from many southern Calif locations listed online. We use ChatLink to link with other BBS systems for nationwide chat every evening from 6pm to Midnight (PTJ) Free time on every call!

**The Westside (213)933-4050** Los Angeles California since 04/87. Sysop: Dave Harrison. Using Metropolis 1.06b with 70 lines on Qnx with 5000 MB storage. AMT; 2400 & 2400 bps. \$57 Monthly fee. One of LA's friendliest, largest and most active adult bbses! Chat Online Games Windows Shareware Files 25,000+ GIFs Animations Adult Stories Public Forums More! 4000+ Members. Special Disabled Vet Senior Student Rate. FREE Trial for Boardwatch Readers!

**BBS BCS (213)962-2902** Los Angeles California since 03/92. Sysop: Bill Weinman. Using WildCat 3.55 with 6 lines on MS-DOS 80486 with 2500 MB storage. U.S. Robotics at 19200 bps. \$52 Annual fee. Los Angeles' fastest growing BBS. Home of CaluLink (sm) "the voice of the people", iLink node, western distribution site for Robocomm & RoboMail. New files daily, free week's total access upon verification.

**The Anterra Network (215)675-3851** Hatboro Pennsylvania since 03/90. Sysop: Steve Ferguson. Using WildCat 3.52 with 5 lines on MS-DOS 80486 with 3600 MB storage. U.S. Robotics at 19200 bps. \$15 Monthly fee. The Philadelphia Area's Best BBS! Basic Access is free, so give us a call! Over 24,000 Files & 38,000 Messages from 6 National Networks Online. Many online games (some Multi-User Real Time). "The Best Game of Trade Wars in the 215 Area Code".

**The Round Table (215)678-0818** Reading Pennsylvania since 03/90. Sysop: Dan MCCoy & Mike Brown. Using PCBoard 14.5a with 7 lines on MS-DOS 80386 with 2500 MB storage. U.S. Robotics at 14400 bps. \$20-\$55 Annual fee. FREE Two Week Access for ALL!!! \*\*\*\* Engineering & AutoCad Specialty System \*\*\*\* 50,000+ Files Technical, Windows, Dos util & More! \*\*\*\* 400+SIGs on 6 Networks \*\*\*\* USAToday, Games & News. \*\*\*\* Member USN and ASP \*\*\*\* FREE Two Week Acc

**A LEGAL GENIUS (215)695-9689** Malvern Pennsylvania since 10/01. Sysop: Marc Bragg. Using Maximus with 1 line on MS-DOS 80286 with 800 MB storage. BOCCA 14.4 at 9600 bps. No fee. Law-Related Files, Law & Political Echo Areas. Lawyers, Law-Students and Normal people welcome. FREE. Legal articles, court opinions, 3rd Circuit opinions; law-school outlines; Wills; Contracts, Leases, etc. FREE. Call today! 215-695-9689

**Newtown Express BBS (215)943-6806** Newtown Pennsylvania since 10/91. Sysop: Anthony Maglietta. Using PCBoard 14.5a with 10 lines on a high-speed LAN with 6000 MB storage. U.S. Robotics at 16.8K bps. \$20 Quarterly fee. 1200-16.8K Baud. THE LARGEST selection of files in the area (PA, NJ, DE)! THE LARGEST selection of original adult GIFS in the area! Deleted sigs and 486 nodes for fast, reliable service. Preview the adult GIFs BEFORE downloading! Call for details.



**UNIX (215)992-1720** Philadelphia Pennsylvania since 04/87. Sysop: Jeff N. Miller. Using Major BBS 6.03 with 14 lines on MS-DOS 80486 with 1910 MB storage. U.S. Robotics at 16800 bps. \$15 Monthly fee. PHILADELPHIA'S FRIENDLIEST BBS! 14 lines, chat, 25 real time multi-player interactive games, 10,000+ files for IBM, Amiga, Mac. Includes 1000+ files for Windows. INSTANT CREDIT online with your Credit Card. New Callers get FREE Demo Time. Call TODAY!

**First Dug Bulletin Board System (301)949-1927** Wheaton Maryland since 08/91. Sysop: Frank Fowler. Using PCBoard 15.0 with 2 lines on MS-DOS 80486 with 690 MB storage. Zoom at 14400 bps. No fee. RelayNet Mail, Fire Dept/EMS, Amateur Radio/Scanner, Adult Conference, CD-Rom

**ITL-NET BBS (302)892-9953** Wilmington Delaware since 12/88. Sysop: David Hudson. Using PCBoard 15.0 with 1 line on MS-DOS 80386 with 4200 MB storage. ZOOM at 9600 bps. \$15 Annual fee. Delaware's Professional Choice(tm). International Mail access through Internet and FidoNet. CD-ROM and Hard Drives combine to provide over 13,000 files. A carousel drive will soon be added to make the total file count over 50,000. CallToday!

**COLORADO CONNECTION (303)423-9775** Arvada Colorado since 12/91. Sysop: Terry Rane. Using TBBS 2.2 with 5 lines on MS-DOS 80386 with 500 MB storage. U.S. Robotics at 14400 bps. \$300 Annual fee. FIVE CD ROMs, 30,000+ files online! 30+ games, Internet, NewsGroups, FidoNet, EchoNet, BirdNet, LasVegas Net, The Wild Side adult game, Helpful Female Sysop!

**The File Bank, Inc. (303)534-4646** Denver Colorado since 01/91. Sysop: Brian Barte. Using TBBS 2.2M[32] with 16 lines on MS-DOS 80486 with 15000 MB storage. Hayes at 14400 bps. \$7.50 Monthly fee. ASP Approved BBS & one of the finest collections of IBM-Compatible Shareware. Many free download areas including extensive libraries of Astronomy Software & Data files. Message Areas, Online Games, Chat. VISA, MC, AMEX. Discover Welcome. Voice: 534-4538

**Pinelliffe BBS (303)642-7463** Pinelliffe Colorado since 01/82. Sysop: Craig Baker. Using Ultrabbs 2.09 with 14 lines on MS-DOS 80386 with 9500 MB storage. U.S. Robotics at 14400 bps. No fee. Largest BBS in RockyMtn Area. FREE \$20/yr gets 2hrs/day, \$100 Lifetime membership. 60,000 zips, CD-Roms, online Games. Home of CDBREG - allows immediate upgrades with credit card. Sysop also runs a computer store. Night Owl \$49. Come help us grow!

**Data Point (303)973-9454** Denver Colorado since 01/83. Sysop: Gary W Funk. Using TBBS 2.2 with 1 line on MS-DOS 80386 with 1100 MB storage. U.S. Robotics at 14400 bps. \$300 Annual fee. Online publications, and multi-player games. Large library of SDN, SDS, and TDN files. Support for MS-DOS, TBBS, TDMS, TMS and TMail support. NetWork and FidoNet message areas.

**Isles of Shae (305)321-2410** Fort Lauderdale Florida since 11/86. Sysop: Edward Bush. Using Major BBS 6.0 with 32 lines on MS-DOS 80486 with 1300 MB storage. Supra at 19200 bps. No fee. We offer Teleconferencing, Online Trivia, Multi-User Interactive Games, Forums, Online Shopping, File Library, Adult Sections, and much more. Come and try out Florida's Largest Multi-User BBS. Free Demo Account with new Sign-Up.

**THE LAMBDA ZONE BBS (312)693-7871** Park Ridge Illinois since 03/90. Sysop: T. Schneller. Using TBBS 2.2 with 16 lines on MS-DOS 80486 with 4600 MB storage. Hayes at 14400 bps. \$32-65 Annual fee. You've seen the rest-now try the BEST! 30,000+ Files. Online stores. HOT CHAT, matchmakers, adult games 100+ conferences. FidoNet, Adult Link, GayCom. Get the most for your online \$! CALL & mention this ad for FREE TRIAL. For more info voice-708-827-3615

**CompuErotica (312)902-3599** Chicago Illinois since 07/84. Sysop: Tiger. Using NitroLite, 11 lines on T-030 with 200 MB storage. Supra at 2400 bps. \$45 Annual fee. If you like your chat hot, you'll love CompuErotic! Online Adult Lifestyle Conferences in chat, support files and bases, member-GIFs and more. Women receive FREE access after voice-verification. Large women's group. Come join the fun! Adults ONLY.

**The Serial Port (313)286-0145** Clinton Township Michigan since 03/82. Sysop: Stu Jackson. Using TBBS 2.2 with 8 lines on MS-DOS 80486 with 6000 MB storage. ZYXEL at 16.8 bps. \$45 Annual fee. C'mon by for a chat and a few files. THOUSANDS of Files with Adult sections available. Many on-line games. Call today for a FREE look around, or Download our on-line disc for your proofing at a later time. Visa/MC/Discover Welcome for INSTANT Upgrade

**GETWay BBS (314)567-6834** St. Louis Missouri since 11/85. Sysop: Michael L. DuBrow. Using TBBS 2.2 with 4 lines on MS-DOS 80386 with 1000 MB storage. U.S. Robotics at 9600 bps. No fee. Small business-GO GLOBAL 10000s of leads-buy/sell-updated daily. 100s of market reports, how-to manuals. Online workshops on global entrepreneurship & Intofech; E-mail to global marketing experts. Download files NO CHARGE! More info 1-800-GETWAY (voice).

**Careers Online (317)873-6283** Indianapolis Indiana since 3/83. Sysop: Scott Thompson. Using PCBoard 14.5a with 2 lines on MS-DOS 80386 with 420 MB storage. Supra at 14400 bps. \$19.95 Quarterly fee. Save time & money. Careers Online provides Manufacturing, Engineering, & Computer Professionals a new BBS to find the perfect job. Employers, use Careers Online to place ads and locate Job Seekers in our powerful database. We advertise nationally!

**Meeting House BBS (011)848-2200** Portsmouth Rhode Island since 01/91. Sysop: John O'Donnell. Using Major BBS 5.31 with 24 lines on MS-DOS 80486 with 1100 MB storage. Supra at 9600 bps. \$1-50 Hourly fee. 4GB shareware. PC & MAC Internet address: bbsnet.com Boston dialup 617 492 3924. Also connected to PSNet in 35 cities, and Ne Tel in RI and Eastern MA. UUCP mail and news. Online games. Nightly chatlink on PDN. Shopping & research services. Adult files.

**Late Nite (402)291-6164** Omaha Nebraska since 12/89. Sysop: John Patrick. Using PCBoard 14.5a with 10 lines on MS-DOS 80386 with 4700 MB storage. U.S. Robotics at 14400 bps. \$3 Monthly fee. GIFs (33,000+), Chat (Adult), ShareWare, OnLine Games and much more. Nebraska's #1 mature GIF source. Home of the LNoxxxn.GIF series!

**ADULT EXPECTATIONS (407)852-2007** BOCA RATON, FL since 03/91. Sysop: Michael Benedict. Using PCBoard 15A with 10 lines on 80386 with 9000 MB storage. INTEL at 14400 bps. \$24 Annual fee. We offer a wide variety of Adult Entertainment including, Livechat, Matchmaker Software, 9000 Meg of files on line from GIFs to the latest Shareware; online Adult Games, and an International Adult Mail Network. Stop in for a Visit.

**HouseNet (410)745-2037** St. Michaels Maryland since 05/91. Sysop: Gene Hamilton. Using WildCat 3.55 with 4 lines on MS-DOS 80486 with 340 MB storage. U.S. Robotics at 14400 bps. \$25 Annual fee. The only BBS with expert home repair and remodeling advise and hundreds of files for downloading. 60+ conference areas. ASP, RIME (1533), FidoNet (1.261/1173) Full access on first call, friendly sysops, quarterly newsletter, monthly product giveaways.

**The Springfield Public Access BBS! (413)536-4365** Springfield Massachusetts since 03/89. Sysop: matthew de Jongh&LindaMcCarthy. Using TBBS 2.2 with 16 lines on MS-DOS 80486 with 7000 MB storage. U.S. Robotics at 19200 bps. No fee. 9 CD-ROMs Online All The Time! Over 80,000 Files, 200+ Message Areas with Over 50,000 Messages from FidoNet & Throbneth, GWK Reader, Writed, and more! Access Multi-User Online Games Including The Wild Side! (Adult Adventure) Over 1,000 Active Users!

**SHARPENIT! RBBS (413)786-4706** Agawam Massachusetts since 03/91. Sysop: Michael Scarbaw. Using PCBoard 17 with 10 lines on MS-DOS 80486 with 1800 MB storage. ZOOM VFX V42 V32 at 14400 bps. \$15.00 Annual fee. ASP APPROVED BBS serving Small Business, and the Community. Over 1.0 GB available with Low \$15.00 per Membership, basic Access No Charge. Featuring BOARDWATCH MAGAZINE, USATODAY, Games, EMS-FIRE, Weather-Alert, Official APOGEE NODE #500. MC & Visa, Per chuk.

**Baudville BBS (416)283-0114** Toronto Ontario Canada since 03/92. Sysop: Ian Evans. Using PCBoard 14.5a with 2 lines on MS-DOS 80386 with 2000 MB storage. U.S. Robotics at 14400 bps. \$36 Annual fee. 1200 Usenet areas, RIME, Intelc, Nenet, C2C, Racenet, RF-Net, Throbneth, FidoNet, FidoNet, and more! Over 2200 conferences. Internet mail. Fido: 1.250/304. The Economical Email Emporium. \$48 membership gets you \$185 in h/w/sv coupons!

**The U.S.A. BBS (501)753-8575** Little Rock Arkansas since 02/93. Sysop: Jeff Johnson. Using TBBS 2.2 with 16 lines on MS-DOS 80486 with 10200 MB storage. AT&T at 19200 bps. No fee. Most popular computers supported. DOS, Windows, & OS/2 files. Many games. One of the largest collections of Adult GIFs as well as scenic GIFs. Large adult area. Also many other sections including Religion, Kids, Business. Contests with v32bis modes.

**TOWER OF BABBLE (505) 243-5810** Albuquerque New Mexico since 04/83. Sysop: Steve Cosmic Rieco. Using Major BBS 6.03 with 6 lines on MS-DOS 80486 with 600 MB storage. Twincom at 14400 bps. \$0.60 Hourly fee. New Mexico Premium Chatting. Chatting with Chat Node, Usa Toady Daily, MajorNet Echo with over 100 Forums, Multi-Player Games, Over 40 Current File Libraries including: Raytracing, Fractals, Morphing, Windows, Tourism, Lots of Gifs all types

**Cul-de-Sac Bar & Grill (510)429-1784** Holliston Massachusetts since 03/85. Sysop: Pete White. Using TBBS 2.2 with 5 lines on MS-DOS 8086 with 380 MB storage. U.S. Robotics at 14400 bps. \$45 Annual fee. The home of many TBBS/TBBS software packages, and an almost continuous beta site for many TBBS/TBBS software authors. Like Ben Cunningham's 10,000 message system with full screen editing and quoting, and Jeff Johnsons On-Line Sales Manager.

**The Gift Shop (tm) (510)689-4686** Concord, California since 09/92. Sysop: Walk Gan. Using WildCat 3.60 with 8 lines on MS-DOS 8086 with 2400 MB storage. U.S. Robotics at 14400 bps. \$18.00 Quarterly fee. At least 25 "EAST" series GIFs. Northern California's link to Throbnat Adult Network. FREE Internet access. BRRAnet graphics forums. Original and extremely Hi-Quality scans. HST: 510-689-4378

**Substation BBBS (516)364-4450** Woodbury New York since 04/86. Sysop: Paul Blaccard. Using PCBoard 14.5a with 3 lines on MS-DOS 8086 with 1600 MB storage. U.S. Robotics at 16800 bps. No fee. Comics & animation, Nutrition, Corvette Forums. Home of Amateurs in Action Magazine. Direct Contact Adult Scans. Featuring premium adult fetish scans/ads and on-line articles. Different, provocative and free! Access with validation.

**America's Suggestion Box (ASB) (516)471-8625** Ronkonkoma New York since 02/92. Sysop: Joe Jerszynski. Using TBBS 2.2 with 16 lines on MS-DOS 80486 with 3600 MB storage. ATT F Dataport at 14400 bps. Robotic 2400-files. ASP approved. Shareware Showcase, Boardwatch, USToday, Internet E-mail, City2City Echost Would you like to see a computer product or service improved? Call and see why you and ASB can make a difference! Generous access time & download privs

**Hi-Tech's Place (516)757-0210** Long Island New York since 07/91. Sysop: Hi-Tech Pete. Using PCBoard 14.5a with 6 lines on MS-DOS 80486 with 14000 MB storage. U.S. Robotics at 19200 bps. \$20 Quarterly fee. BBS for Scans and Shareware. Over 50,000 quality GIF & Hi-Color Scans Online, also DOS, WINDOWS & ADULT files. Register and Credit Card Membership Online. One of the Largest and Fastest growing BBS in the Northeast. Come and Teck Us Out for FREE

**House Of Files BBS (516)938-6722** Hicksville New York since 08/85. Sysop: Jim Tiro. Using TBBS 2.2 with 32 lines on MS-DOS 80486 with 28400 MB storage. Supra at 19200 bps. \$30 Quarterly fee. Largest file system in New York. Over 150,000 files ALWAYS online. Over 10,000 music files, 10,000 public domain clip art files and tens of thousands of other. Call us and find out why hundreds of people subscribe to our system. Browse around for free!

**Wolverine (517)631-3471** Midland Michigan since 07/88. Sysop: Rick Rosinski. Using Seachlight 2.25C with 4 lines on MS-DOS 80486 with 6000 MB storage. U.S. Robotics at 19200 bps. \$35 Annual fee. Mid-Michigan's Largest BBS with over 60,000 files & NINE CD-ROM's! Special support for Windows/DESQview/Mac/Amiga/Mac. News/Stand/Apogee Distribution Site 1038.

**Somewhere Out There (602)838-9707** Phoenix Arizona since 02/93. Sysop: Jeff Wolkove. Using Coconet 3.3c with 8 lines on UNIX with 650 MB storage. ZyXEL at 14400 bps. \$12.50 Monthly fee. Somewhere out there is a place where people find each other. Unique COCONET-based graphical BBS for singles. Personal ads, chat, public meetings, special support groups for newly single, single parents, senior dating, etc. Anonymous and private. Try us!

**Windows Download Center (607)722-5512** Vestal New York since 04/91. Sysop: Howard Bellis. Using Aurti 5.12 with 3 lines on MS-DOS 80486 with 540 MB storage. ZyXEL at 16800 bps. \$25 Annual fee. 2500 Windows shareware programs, latest versions, with 200 new or upgraded programs monthly, based on an extensive national search.

**The Manor House BBS (609)267-4124** Mt. Holly New Jersey since 05/93. Sysop: Alan Brown. Using Major BBS 6.11 with 4 lines on MS-DOS 80486 with 770 MB storage. Hayes at 14400 bps. \$0.06 Hourly fee. Specializing in online entertainment and role playing games. Come join the fun and help us grow! Instant access available on your first call.

**The Friendship Express (612)566-5726** Minneapolis Minnesota since 12/88. Sysop: Glen Williamson. Using Major BBS 6.03 with 25 lines on MS-DOS 80486 with 450 MB storage. Hayes at 16800 bps. \$51/hr Hourly fee. We are primarily a contact/social board with members from all fifty states and several Canadian Provinces. Our members includes singles, couples, b'i's, gays, lesbian, as well as those interested in alternative lifestyles such as leather, Xdress, etc.

**Interactive Personals Network (612)890-8405** Burnsville Minnesota since 04/93. Sysop: Olivier Meyer. Using Coconet 3.3c with 4 lines on MS-DOS 80486 with 600 MB storage. ATT at 14400 bps. \$40 Annual fee. Graphical system devoted to online personals, chat and matchmaking. Large download area as well. Easy to use Access program provided with membership. View pictures online and exchange musical email. Send your picture and it will be placed online.

**ASA CompuHelp BBS (614)476-4058** Columbus Ohio since 05/92. Sysop: Jeff Binkley and Rick Korecki. Using PCBoard 15 beta with 4 lines on MS-DOS 80486 with 3600 MB storage. Hayes at 14400 bps. \$300 Annual fee. Central Ohio's fastest growing BBS! FidoNet, StormNet, FULL Usenet Feed, Internet E-Mail, CDROM Drives, UPI and API News wires and more! Featuring FULL Usenet feeds for low low prices. Known for our newsletter and great technical support! Check-us-out!

**12 GB, The Rose and Crown BBS (615) 892-0097** Chattanooga Tennessee since 06/85. Sysop: David Ellison. Using PCBoard 15 beta with 6 lines on MS-DOS 80486 with 12000 MB storage. U.S. Robotics at 14400 bps. \$33.00 Annual fee. Free 30 minutes per day with no ratios, no limits, 18 CDROMS on line, RIME Echomail. System is very fast. Over 130,000 files, over 12 Gigabytes. Download with first call.

**The 3rd Eye Electronic Erotic Magazine (615)227-6155** Nashville Tennessee since 05/86. Sysop: Michael Vetter. Using TBBS 2.2 with 32 lines on MS-DOS 80486 with 1000 MB storage. Hayes at 9600 bps. \$30 Annual fee. A friendly gathering place for couples and singles with an interest in the swinging lifestyle. Personal ads (all lifestyles), digitized photos of members, online chat, adult downloads, club information, adult echos, lifestyle support, multuser games.

**Sounds Of Silence (615)449-5969** Nashville Tennessee since 07/92. Sysop: Jim Walton. Using Major BBS 6.03 with 32 lines on MS-DOS 80486 with 15000 MB storage. Practical Peripheral at 14400 bps. \$510 Monthly fee. Great "Live" Chat and Entertainment System. Games, 15 Gigs of files, forums, classifieds. 24 hour access, dating surveys, E-Mail, WATTS lines, credit card and 900 billing, 32 high speed lines. Online fortune telling. An interesting system.

**Executive Connection Online (617)861-6090** Cambridge Massachusetts since 07/86. Sysop: Marcia. Using Major BBS 6.03 with 15 lines on MS-DOS 80486 with 400 MB storage. Intel at 14400 bps. \$40.00 Annual fee. Home to some of the friendliest BBSers in New England! Stop by and say hello! Featuring Action Telecon with custom enter/text messages, Globals, Global Actions, Graffiti Wall, MatchMaker, File Library, Games, Trivia, E-mail, Forums, Mail, Visa/MC/AmEx 18+

**Tiffany Club of New England (617)899-3230** Waltham Massachusetts since 12/92. Sysop: Debra. Using WildCat 3.51 with 4 lines on MS-DOS 8086 with 120 MB storage. Supra at 2400 bps. \$25 Annual fee. Support and Education for the Transgendered Community, their Family, Friends and Spouses. Multi Node Chats. Resource Files and Extensive Message Areas for the Discussion of Related Issues. Public Access areas available. A Friendly and Caring Board.

**The White Zone BBS (617)969-3138** Newton Massachusetts since 10/90. Sysop: David Saganay. Using TBBS 2.2 with 8 lines on MS-DOS 8086 with 2700 MB storage. U.S. Robotics at 16.8k bps. \$25-75 Optional fee. 1.9+ GB of IBM MS-DOS Shareware, Adult Graphics, Midi & Soundcard Files, Flight Simulator, Geoworks, Windows, WazWare & More! Online Games, Classified Ads, BBS Listsings, QWK Offline Mail Reader Support & PC Catalog Online! ASP Approved BBS

**Classified Connection (619)566-7347** San Diego California since 03/84. Sysop: Bill Kennon. Using WildCat! 3.55 with 15 lines on MS-DOS 80386 with 2200 MB storage. U.S. Robotics at 19200 bps. \$35 Annual fee. Features Buy, Sell, Swap Meet, national and local conferences, all original graphics. Classified Connection featuring Buffy, EMail, Original G, R, XXX rated graphics 100% licensed for BBS use Ask us about Gifty God CD ROM copy specials.

**Public Access Information Service (702)383-9939** Las Vegas Nevada since 01/87. Sysop: Rick Cross. Using WildCat! 3.60P with 11 lines on MS-DOS 80486 with 8700 MB storage. Supra at 14400 bps. \$39 Annual fee. Largest BBS in Nevada! "We Got It ALL" All lines High Speed, HST, HayesV, Zyxel, and V-32bis, 18 CD-ROMs online, IBM-DOS, Windows, OS2, & Amiga. ASP Approved #98. Full time Professional Staff. Visa/MC online memberships as low as \$10.

**Computron BBS (702)732-1789** Las Vegas Nevada since 04/93. Sysop: Dee O'Dell. Using Major BBS 6.11 with 14 lines on MS-DOS 80486 with 870 MB storage. InfoTel at 14400 bps. \$5.00 Monthly fee. Friendly and exciting live CHAT. Many multi-user games. Door games. 1000's of files online to download. Free trial for new users. Adult section with files and chat. Fido Net, and much more coming soon. Call now, and see for yourself.



**Crystal Quill (703)241-7100** Arlington, Virginia since 04/93. Sysop: Crystal. Using Major BBS 6.03 with 40 lines on MS-DOS 80486 with 4,000 MB storage. Zyxel at 2400 bps. \$6 Hourly fee. Washington D.C.'s fastest growing BBS!! 40 Line Chat-based system, multiplayer interactive games for all ages, separate activities and areas for adults, CD Rom, INSTANT on with VISA/MC or our 1-900 number! Free 2 hours free! PC PURSUIT access DCWAS.

**The Abyss (703)878-0879** Woodbridge Virginia since 06/91. Sysop: DarkMan. Using VBBS 5.60 with 6 lines on Novell 486/50 Server with 5500 MB storage. Zyxel at 16800 bps. \$35 Annual fee. We have 5.5 Gigs of files and adult material. We offer VirtualNET, FidoNET, INTERNET/USENET, VGA On-Line games w/SB support. We post 30 megs of new files a week and receive approx. 1000 messages a day. Register via VISA/MASTERCARD. On-line shopping!

**MidWest BBS (708)513-1034** St. Charles, Illinois since 02/85. Sysop: Steve Mills. Using PCBoard 15.0M with 5 lines on MS-DOS 80486 with 2300 MB storage. U.S. Robotics at 19200 bps. \$35 Annual fee. Illinois' Professional Bulletin Board. Experienced, friendly SysOps whose only goal is TOTAL USER SATISFACTION. 30-megs of new files each wk. Free trial membership. PC-Catalog. All nodes up to 14,400. Charter link member, Internet Mail and more

**Space City Graftix (708)748-4025** Park Forest Illinois since 02/85. Sysop: Felix Dave Mills. Using PCBoard 14.5a with 1 line on MS-DOS 8088 with 275 MB storage. U.S. Robotics at 19200 bps. \$35 Per 6 Month fee. A BBS dedicated to offering you the best in hi-quality, hi-resolution science fiction-Fantasy GIF images. We continue to grow everyday, so give us a try. You will be disappointed. Accepting VISA-MASTERCARD online. See you soon.

**Archives BBS (713)896-1721** Houston Texas since 02/93. Sysop: Felix Dave Mills. Using Synchronet with 3 lines on MS-DOS 80386 with 1000 MB storage. Practical Peripheral at 9600 bps. \$50.00 Annual fee. Internet E-Mail, UseNet, Adult GIFS, Family GIFS, Uploads welcome, Dove-NET, QuestNet, Doors, GIFs for the discriminating collector.

**The Liberty BBS (714)996-7777** Anaheim Hills California since 07/92. Sysop: John Galt. Using Major BBS 6.03 with 58 lines on MS-DOS 80486 with 5420 MB storage. Zyxel at 16800 bps. \$10 Monthly fee. PC-Pursuable at D/CASAN/24 ATDT9967777. local access numbers from many southern Calif locations listed online. We link via ChatLink with other BBS systems for nationwide what every evening 6pm to Midnight (PT). Free time on every call. Much much more!

**Windup BBS (718)428-6123** New York New York since 01/92. Sysop: John Brooks. Using TBBS 2.2 with 12 lines on MS-DOS 80486 with 1800 MB storage. U.S. Robotics at 14400 bps. \$50.00 Annual fee. An adult meeting place, with HeartBeat Matchmaker Database and GIFs of your online. Mature adults and couples meet online and offline. GIF previewing, very active message and chat area. Serious sensuality and frank sexuality. Free weeks trial for adults

**Impax Online Chat (718)932-7710** Long Island City New York since 03/93. Sysop: Bob Gramaglia. Using Custom Videotex with 12 lines on MS-DOS 80486 with 700 MB storage. US Modem at 14400 bps. \$12 Monthly fee. A very unique chat service which requires special software that lets users; view and create animations, play music, change fonts etc. 3 kinds of live chat, private files mailboxes and free scanning service let users send eachother photos. Visa/MC/Amex.

**Panacea BBS (818)569-3740** Glendale California since 05/89. Sysop: William Padilla. Using PCBoard 14.5a with 2 lines on MS-DOS 80486 with 120 MB storage. U.S. Robotics at 14400 bps. No fee. We are a TOTALLY FREE system which offers over 300 echomail conferences (networks) include: iLink, SFnet, Metrolink, and CallLink. Offline mail (OWK) is fully supported. Several awesome strategic door games are available. Modest file area.

**Digital Aspects (901)758-2580** Memphis Tennessee since 12/92. Sysop: Chuck Florida. Using TBBS 2.2 with 8 lines on MS-DOS 80386 with 1400 MB storage. U.S. Robotics at 14400 bps. \$7.00 Monthly fee. ALWAYS the MOST of the BEST! 20 CD's ALWAYS online. If you can't find it here, then it can't be had! Direct link to the Shareware Distribution network, so always giving you the LATEST and the BEST! Over 40,000 Adult GIFs and animations!

**ShadowRift BBS (904)996-9322** Jacksonville Florida since 01/93. Sysop: Paul Taylor. Using PCBoard 14.5a with 3 lines on MS-DOS 8088 with 3000 MB storage. U.S. Robotics at 14400 bps. \$25 Optional fee. Gigabytes of Shareware available for download. Home of the best file request door ever, The Ultimate File Request Door. Call & Download the latest version under the name UFDD ZIP or FREQ it from Fido Address 1:112/63 under the magic name REQUEST

**SBG OnLine (904)757-8636** Jacksonville Florida since 02/93. Sysop: Al Segura. Using PCBoard 14.5a with 1 line on MS-DOS 8088 with 700 MB storage. Cardinal at 14400 bps. No fee. Specialize in fonts and clipart. PIER-1 CD online. T-shirt, ballcap screen printers and Quorum products can be ordered online. VISA/MC accepted.

**InfoMarket Express (908)879-7209** Chester New Jersey since 01/93. Sysop: Edward Brzezowski. Using PCBoard 14.5a with 3 lines on MS-DOS 80486 with 400 MB storage. Hayes at 14400 bps. No fee. InfoMarket Express - Where information is bought and sold online. Free access, no subscription or registration fees. Providers make money when their files are sold. Please note that 908 is a new area code in NJ and not a 900#.

**Bits and Bytes BBS (909)356-5762** Fontana California since 09/91. Sysop: Barry Redsar. Using PCBoard 14.5a/10 with 7 lines on MS-DOS 80486 with 500 MB storage. U.S. Robotics at 16800 bps. \$20 Annual fee. BES BBS around! You do not believe us? Well call and find out for yourself! Howcan you go wrong? Over 35000 files online (every week we have 500 new files), 50 Door games, 400 conferences (RIME, U'NI & Throbnit). Large adult GIF collection!

**Legend Graphics OnLine (909)689-9229** Riverside California since 11/91. Sysop: Joey Marquez. Using PCBoard 15.0 with 6 lines on MS-DOS 80486 with 6000 MB storage. USR/Zyxel/AT&T at 57600 bps. \$10 Monthly fee. Nation's One-Stop Graphics BBS! You will be impressed! Huge Adults Only file areas. Simply the BEST in Southern California! Call and look for yourself. Visa/MasterCard/AmEx/Optima accepted.

**ExecNet Files By Tape Service (912)667-4567** Mount Vernon New York since 05/85. Sysop: Andrew Keeves. Using PCBoard 15.0 with 20 lines on MS-DOS 80386 with 14000 MB storage. U.S. Robotics at 14400 bps. \$10 Yearly fee. ATTENTION SYSOPS! SAVE BIG DOLLARS, on your phone bills. ExecNet Files by Tape Service will supply you with up to 59.5mb of compressed files on a single tape. Download #files.zip for more info. Call NOW @ 914-667-4567. We ship World Wide.

**ExecNet (914)667-4567** Mount Vernon New York since 11/85. Sysop: Andy Keeves. Using PCBoard 15.0 with 20 lines on MS-DOS 80386 with 14000 MB storage. U.S. Robotics at 19200 bps. \$10 Yearly fee. Bringing you the world. Free online eval. time. 8 hrs/call, up to 32MB download/call. 90K+ files, 4K Int'l confs., Usenet/Internet. Immediate access with major credit card. Fantasy Area. Email to/from Compuserve, MCI. 10MB+ new files daily.

**The Machine BBS (914)883-6612** Modena New York since 06/89. Sysop: Greg Aldrich. Using PCBoard 14.5a with 2 lines on MS-DOS 80386 with 800 MB storage. U.S. Robotics at 14400 bps. \$25 Annual fee. FREE month's evaluation. Over 600mb of files for download. We carry FidoNet, Magnet, Skynet and now offer Internet E-Mail. Many online doors including Real-Time human-vs-human games. Call today for a free evaluation and D/L our filelist.

**Black Gold BBS (918)272-7779** Tulsa Oklahoma since 06/81. Sysop: Roger Ridgway. Using PCBoard 15.0 with 12 lines on MS-DOS 80486 with 18000 MB storage. U.S. Robotics at 57600 bps. \$29 Annual fee. Internet, Rime, Intelec, 10mb per day, USAToday, Over 90 Doors, Full time SYSOP's and much much more. Many free areas and files with 30 minutes free access per day. 225 file areas and over 150,000 zip files. Customer support and computer specials!!!!

**Micro Message Service (919)779-6674** Raleigh North Carolina since 10/82. Sysop: Michael M. Stroud. Using TBBS 2.2 with 10 lines on MS-DOS 80386 with 5200 MB storage. U.S. Robotics at 14400 bps. \$45.00 Annual fee. NC's #1 online info service support for PC, Mac, Amiga and Atari ST. Hundreds of new files added weekly. Expert leaders for each SIG. Authorized eSoft dealer, system design and TDBS programming. Give your online system a leading edge, call us first.



## Everybody's Talking On the Star BBS Computer Network!

The Starship J! BBS: (201) 935-1485\*  
Jezebel's Parlour: (201) 927-2932  
The Swinging Door: (908) 525-5801

\*Subscriber Line: 1-800-LOG-INTO  
(800-564-4686)

~ Online Chatting ~ 50,000 Adult Graphics ~ Multiplayer games  
~ Adult Matchmaking ~ 20 Gigabytes of files! ~ 100's of Msg Areas

\*Now with International 9600 baud access! For your local Starship  
access number, call: 1-800-521-2733 (in Canada, 313-995-6595).

# GRAFIX

Adult computer images

*You won't believe your eyes*

## Adult computer pictures hot enough to melt your modem

Discover the world's best source for adult computer  
pictures. Try Grafix. We offer easy local access via  
PC Pursuit from 500+ cities. Call today.

**XXX Rated & Super Low Cost**

**Log On: 516/689-2853 • Up to 14,400 baud**

## PREHISTORIC PRICES

Call America's BBS Specialists And Save!

### Software:

COCONET  
DOORWAY  
THE MAJOR BBS  
ORACOMM  
QMODEM  
SEARCHLIGHT  
TBBS & TDBS  
WILDCAT! BBS  
XCHANGE

Toll-Free Order Line  
800-488-9831



Customer Service &  
Technical Support

313-477-0067

### Hardware:

DIGIBOARD  
HAYES  
INTEL  
PRACTICAL  
TELEBIT  
US ROBOTICS

Call For Others...

# TELESAURUS

TM & © 1992 Telesaurus Corporation, 21832 Green Hill, Farmington Hills, MI 48335-4310



# FREE ACCESS

Never a charge! Never a charge!

Dial into America's newest  
and hottest BBS.

Totally unbeatable one-on-one  
and partyline action.

62 lines! Major BBS V6.0  
Exciting graphics and the best  
downloads anywhere.

Also mega shareware files,  
multi-user games, sizzling gif files  
and hot message forms.

Make your modem smoke!  
Call Now!



# 1-715-758-1000

## "Delight The Customer" BBS

For Customer Service, Training,  
QA/QC, Telemarketing,  
and Help Desk Professionals.  
Nationwide Jobs Database, Files  
and Message Conferences.

Very "Beginning-BBSer Friendly"!



No-Cost  
Memberships

**517-797-3740**

ASP Approved BBS

### Business/Professional BBS List

Online searching & full descriptions.  
If you operate a BBS which is  
business-oriented or focuses on a  
profession, call and list it with us!

## PC-Ohio PCBoard

The Best BBS in America



VOTED THE BEST BBS IN AMERICA  
1990 and 1991 BY COMPUTER  
SHOPPER

- 50 Nodes
- 350 Doors
- 100,000 Files
- 15 Gigabytes
- 400 Directories
- 2500 Conferences
- 2400/9600/14400/16800 BPS
- All Nodes USRobotics HST  
Dual Standard 16800 Modems
- V.32 V.32bis
- V.42 V.42bis
- MNP5

We are members of RIME, Smartnet, U'NI-net, RFnet,  
Racenet, Sportnet, Fidonet, Biznet, Chucklenet, Intelc,  
Friendsnet, Harenet, NAnet, Ilink, City2City, Annex,  
BASICnet, Byte Brothers, Execnet, Sourcenet, After  
Dark, Throbnet, 18+ and Internet (pcohio.com).

**(216) 381-3320**

## HIGH SPEED I/O CARDS & NS16550AFN's

Having high speed modem problems, loss of  
connection when multi tasking, or just looking  
for a way to speed up your transfers?

### Dual Serial, Socketed Communications Card-

Including (2)-16450 (stock chip).....\$16.50

### Dual Serial, Parallel, Socketed Commu- nications Card-

Including upper IRQ's & 2 16450 (Stock  
Chip).....\$24.50

### NS16550AFN (High Speed Chip)-

(Replaces Stock Chip).....\$10.00 each

Many other PC components available, along with  
complete systems - call today for lowest prices!

**FREE!**  
Prodigy with  
every order!

(While supplies last)

### MATRON

P.O. BOX 195123  
WINTER SPRINGS, FL 32719

**(800) 453-3205**

## The Adult BBS Guidebook

1993 Edition

By Billy Wildhack

Get your copy of the first book to map out the world of cybersex.

- 128 pages.
- Helpful intro for new users.
- 100+ boards listed by state.
- Up-close look at 45 of the hottest boards around.
- Locate boards that fit your budget and lifestyle.
- Not available in bookstores.
- Only \$12.50 Postpaid.  
(Overseas orders add \$2.50)

Send Check or M.O. to:

Keyhole Publications

P.O. Box 35-BW Sycamore, IL 60178

# Warning!

**Meeting Friendly Users  
May Be Caused by  
Entering THIS BBS !**



*America's Largest Gay & Lesbian  
Computer Information Service  
and Resource*

Community News & AIDS Info  
GIF and File Sections - Profiles  
Multiuser Games - Hot Chat  
Commercial Services  
USA Today Online and MORE!


PC-Pursuitable with Direct  
Overnight E-mail to over 25  
Gay/Lesbian boards via GayCom

**CALL with your computer TODAY!**

**(718) 951-8256**

You must be 18 or older  
300/1200/2400/9600/14.4k baud B,N,I

1412 Avenue M, Suite 2517, Brooklyn, NY 11230



# NTELOG BB5



357 CONFERENCES


20 Nodes

Register Online

OS2 • DOS • Windows  
& Image Files  
Internet • Usenet  
Rime • ILink Email

(408) 655-1096 2400 bps  
(408) 655-8294 v.32bis  
(408) 655-8297 USR HST



## Your Data + CD-ROMS = \$\$\$

Just follow the formula above and start turning those file bases into cash. Scanners, you can make more for your efforts then just BBS subscriptions.

**Making a CD-ROM is easy!**

This is how it works.....

You send us your data. We Pre-Master, Master, and even design your artwork if necessary. These are all **ONE TIME** charges. From there all you incur is disc price and shipping costs.

So lets say you want to press 100 discs....TOTAL startup fee's will only be about \$1500. Sell 28 discs at \$55 each and your **ENTIRE**

investment is **PAID OFF**. From there you can start looking forward to **\$3,400 PLUS PROFIT !!!**

We are a full fledged service bureau committed to putting out the highest quality, and most profitable discs possible.

And if you've looked around you'll be happy to see that we specialize in **ADULT** material. We guarantee confidentiality, and most of all **RESPECT!**

Also if you require any hardware such as: MS-DOS systems, Amiga systems, Mass Storage, scanners, etc. Ask to speak with a representative of our parent company, Elite MicroComputers.

# E-COMM

Voice: 908-541-4214

Fax: 908-541-6348

*Elite Communications*

P.O. Box 38

Port Reading, NJ 07064-0038



INTERNATIONAL LIST OF ELECTRONIC BILL OF LADING BOARDS AND ON-LINE INFORMATION SERVICES - AUGUST 1993

[illegible]

[illegible]



NATIONAL LIST OF ELECTRONIC BULLETIN BOARDS AND ON-LINE INFORMATION SERVICES - AUGUST 1993

[illegible]

Qualitas, Inc. BBS	301/907-8030	386MAX and BlueMAX Memory Management Software Support	Qualitas Inc.	Bethesda, MD
Quarterdeck BBS	310/314-3227	Technical Support for CEMM, DESView, all Quarterdeck Prods	Quarterdeck Office Systems	Sanita Monica, CA
QuickBBS Support BBS 363/304	917/866-0694	Product Support for QuickBBS Software	Richard Creighton/Steve Gabrielowitz	Orlando, FL
Rainin BBS	214/356-2663	11,000 GIF Images - 20,000 DOS/Windows Shareware Files	Janice Stevens	Corbett, OR
Rose Media	416/733-2780	19 GB PC Board on File of Reusable Publications/Conferences	Chuck Watten	Red Oak, TX
Rusty & Edles	216/726-0737	Large ML PCBoard run by Husband and Wife - NFL/IT/Software	Rusky Edwina Hardenburgh	Windsor, ON
Sahara Club BBS	818/893-1466	Land-Use Issues, Off-Road, Timber, Conservation	Patrick Martin/Sahara Club	North Hills, CA
Sailing BBS	301/643-1869	National sailing system, yacht racing and clubs, sail ships	Darren Albert	MD
Sailing BBS	818/963-9875	Support for Next Computers	Clark Development Company/David Terry	Murray, UT
SBA Online	800/697-4636	Some of PCBoard BBS Software - National List of PCB Sys	Brian Dear/San Diego NeXT User's Group	San Diego, CA
SBA Online	202/834-1784	Federal R&D Budget - Technical Labor Market Statistics	Small Business Administration	Washington, DC
Science Resource Studies BBS	202/834-0370	The Original Software Distribution Network	Ray Kalles	Washington, D.C.
SEBard	804/425-6047	Support system for ARC, SEADOG, and AXE Models	System Enhancement Associates	Nassauvally, VA
Searchlight BBS	516/893-7873	Installation and Specifications for Hard Drive Models	Seagat/Bill Rudok	Scotts Valley, CA
Searchlight BBS	404/841-8968	Support system for Searchlight BBS Software	Stony Brook, NY	
SENDIT	701/237-3283	Home of SENDIT - The Original Mail Transfer Keen Series	Sammy Mitchell/SeaWare Software Products	Manetta, NY
SENDIT BBS	325-590-4168	CD-ROM Optical Publishing Info - Lists of Gov. CD Data	SIG CD-ROM Publications and Technol.	Cargo, ND
SIGMA Professional Information	825-590-5988	Genology Programs File Distribution Net 1/27/23	Technologia Uno Cero S.A. de C.V.	Gallatinburg, MD
Society for Technical Comm. BBS	702/522-3550	Home of Sigma - The Original Mail Transfer Keen Series	Dan Linton	Washington, D.C.
Software Express BBS	508/868-4137	Family Oriented Christian BBS	Eric Johnson	Fremont, CA
Sonsline Express BBS	510/851-2440	Twenty Line PCBoard with 2 Gigabytes Storage - HST Modems	Erin VanRiper	Blairstown, NJ
Sound Advice BBS	816/358-4516	Clipboard/XBase/General Programming File Distribution 10/7/20	Larry Murphy	Baestown, MO
StarLink BBS	516/888-7281	Windows Distribution Network - Windows utilities/files	Michael Keylin	Bedford, TX
StarLink Network BBS	718/972-6069	Hazardous Materials/National Dam Watch/Engineers	John Land	Sweetwater, TX
Starlink BBS	915/935-4818	Online Democracy/Political Culture for the Future	Travis Smith	Washington, D.C.
State and Local Emergency Mgmt.	305/370-9376	Botany, Herbaria, FLORA ONLINE Newsletter, Latin Translation	Clinion Herbarium, Buffalo Museum	Dayle, NY
Superemocracy Foundation BBS	915/935-7581	Home of M2000 File for Protocol/M2000/YAM	Telebit Corp.	San Jose, CA
TCAMate Unix Bulletin Board	408/745-3225	Support Service for TEAMate BBS Software for Unix	Bob Baskerville/MMB Development Corp.	San Jose, CA
Telebit Support BBS	503/621-3748	DBMS/DR: Dobbs Journal Magazine Online Software	Telebit Corp.	San Jose, CA
Telepath	415/538-8861	America's Largest Exclusively Gay DB - Home of Gaycomm	Chuck Forrester/Omen Technology Incorp.	San Jose, CA
Telepath Support BBS	918/481-9399	16 Lines Support for Microsoft Windows	Free Hook	Portland, OR
The Business BBS	318/459-1614	Specializing in outdoor activities and sports	Jeff Wood/DeleComm Development	Redwood City, CA
The File Bank	303/534-4546	Home of Textview Door for PCBoard	Jim Appleby	Redwood Hill, NY
The Ledge PCBoard	818/896-4015	Home of Textview Door for PCBoard	Joseph Sheppard	Tuljunga, CA
The Opend Crowd	708/895-8865	Home of Textview Door for PCBoard	Grand Westering/Brian Bartee	Tuljunga, CA
The Other BBS 1/10	717/657-2223	Home of Textview Door for PCBoard	Whole Earth Electronic Link	Hoffman Estates, IL
Thian BBS	915/332-1910	Home of Textview Door for PCBoard	Clayton Manson	Harrisburg, PA
Tool Shop BBS	818/891-6760	Home of Textview Door for PCBoard	Sam Smith	Pasausatto, CA
Town Hall	800/548-6864	Home of Textview Door for PCBoard	National Review Magazine	Pasausatto, CA
Trinity 1 BBS	44-352-4102/10	United Kingdom Distributor of Boardwatch Magazine	Exceler Devon U.K.	New York, NY
Urbard	615/766-7810	Support for US Robotics HST 9600 bps Modems	US Robotics Corporation	Chattanooga, TN
US Naval Observatory BBS	303/273-5075	Date - Sunrise - Sunset - Enter @TCO for Commands	Stoke, IL	
USGS Quick Eponenter Determin.	303/273-8972	Earthquake Catalog - 122 800-386-2663	US Geological Survey	Denver, CO
USNO Time of Day for Clocks	202/553-0331	Xmils ASCII Time Catalog - 3 million entries	US Naval Observatory	Washington, D.C.
UT Library Online Catalog	512/717-9420	Online Library Card Catalog Using 3.5 million entries	University of Texas at Austin	Austin, TX
Ventura Professional Forum	408/227-4818	Ventura Publisher User's Group BBS	Western Digital Corporation	San Jose, CA
Ventura Professional Forum	915/753-7669	Online Weather Forecasts for Any City - Download Radar Data	Western Digital Corporation	San Jose, CA
Westside, The	213/353-0650	Area's Largest Chat Room - Chat, E-mail Games	MSI - Mustang Software, Inc.	Los Angeles, CA
Wildcat HO BBS 20/12	800/395-0650	Multi-line Support System for Wildcat BBS Software	MSI - Mustang Software, Inc.	Bakersfield, CA
Windsor Manor	203/688-4973	Over 27 Online Adventure Games	MSI - Mustang Software, Inc.	Windsor, CT
Windsor's Gate, The	614/224-1035	Multi-Line Totally Free BBS-Multi Player Games, Files, Message	MSI - Mustang Software, Inc.	Columbus, OH
Worldview BBS	810/226-2319	Word Perfect 4.2/5.0/5.1 Support/Printer Drivers	World Perfect Corporation	Windsor, CT
WWIV Support BBS	310/208-6689	Support for WWIV BBS - Telex/Printer Host	Bill Gram-Raefer	Jersey, NJ
XTree BBS	800/546-9150	Support for XTree Pro Gold DOS Shell Program	Wayne Bell	Rolling Hills Estates, CA
XQuest Support BBS	509/657-5669	Support for XWrite Word Processor - Custom Keyboard Files	XTree Company	San Luis Obispo, CA
Yellow Dream Machine BBS	512/451-3222	Disability Rights Issues - Variety of Disability Newsletters	Yellow Dream Machine	Bellerica, MA



# RoboBOARD FX

The Original Online Graphical User Interface by Hamilton TeleGraphics Inc!



Meet Us at the ONE BBSCON  
in Colorado Springs, Colorado.  
Booth # 64

RoboBOARD/FX is defining the future of the Bulletin Board Industry! While other BBS packages add workaround graphics to their text boards we have been quietly developing the definitive online GUI! RoboBOARD/FX presents REAL realtime graphics NOW!

Our realtime Tel-FX protocol provides blazingly fast, device independent 256/16 color SVGA graphics. We also give those users without IBM graphics an intelligent ANSI interface. The FREE full featured Tel-FX terminal package, offers your users a natural icon driven interface.

Whatever the focus of your BBS, RoboBOARD/FX gives you all the graphics power you need to convey your ideas with vision. The Tel-FX graphics designer fuels your imagination with its intuitive click and go drawing tools.

RoboBOARD/FX is a complete Bulletin Board System having all the features and power seen in many BBSs costing much more. PLUS you get the best graphics in the online industry for FREE! Call our BBS today, and download a test drive version of RoboBOARD/FX. Experience the future now!

---

Hamilton TeleGraphics Inc. PO Box 633 Aymer Quebec Canada J9H 6L1 Phone (819) 682-6670 Fax (819) 685-0994 BBS (819) 682-7771  
Duke Graphics 4130 La Jolla Village Drive Suite 107-169 La Jolla CA 92037-1480 USA Phone 1-800-DUKB-GFX Inquiries and orders.

---

# TBBS Sysops!

Announcing *Jack Rickard's*

## Personal Internet Mail Processor (PIMP) Version 2.00

Option Module for TBBS

**Let PIMP connect your TBBS system to the world!**

### TBBS SYSOPS!

The hottest area in the Bulletin Board world today is making the connection to the global Internet e-mail network. Allow your callers to send and receive electronic mail to CompuServe, GENie, America Online, and thousands of other hosts in over 40 countries around the globe.

True 100% assembly language TBBS option module loads with your bbs to process inbound and outbound UUCP mail files continuously without ever taking your BBS offline to process mail.

**NEW in 2.00**

#### Internal UUCPg Protocol Dialer

Uses any available BBS line to automatically dial your host and exchange mail. NO NANNY MACHINE OR LAN REQUIRED! Our own internal implementation of the UUCPg protocol.

**NEW in 2.00**

#### Open PIMP

Spawns ANY TBBS application on receipt of mail or on creation of mail.

**NEW in 2.00**

#### Usenet News Groups

Provide your callers access to the largest shared message conference on the planet - 4700 message conferences and 50 MB daily to choose from. No limit to the number of conferences you can carry. VERY SIMPLE CONFIGURATION!

**NEW in 2.00**

#### FTP File Server

Allows anyone to send e-mail requesting a file from your system, and receive it by return mail as UUENCODED file attachment.

#### Mailing List Server

Moderate your own mailing lists reaching thousands of correspondents worldwide on any topic you choose. Auto add/delete in response to - REQUEST messages.

#### Inbound/Outbound File Attachments

PIMP automatically handles UUENCODE/UUDECODE of file attachments across the Internet - IT WORKS JUST LIKE TBBS!

Inbound aliasing, bounce message advisories, mailing list redirection to a public message board, and more!

Your callers deal with Internet mail using all the features of the existing TBBS message system - replies, searches, message scan, forward, file attachments, message waiting que, .QWK offline mail readers (requires eSoft's QSO option module). PIMP extends your TBBS message base to encompass the world, making global mail easy for your callers. Messages can go out within one minute after caller entry.

**PIMP for TBBS - Option Module Version - \$249.00**

Copyright 1992, Jack Rickard

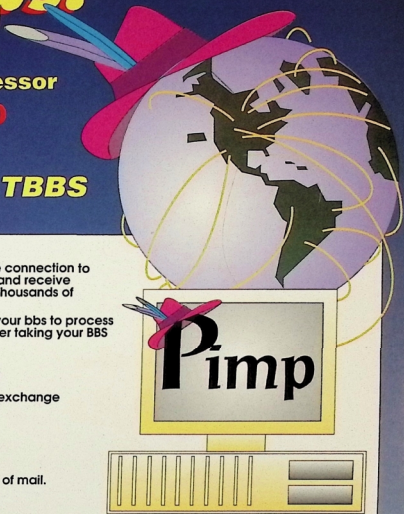
visa/mc  
accepted

**For more information or to order, Call Boardwatch Magazine at:**

**(303) 973-6038**

**(303) 973-3731 fax, (303) 973-4222 BBS**

\*TBBS is a trademark of eSoft, Inc.



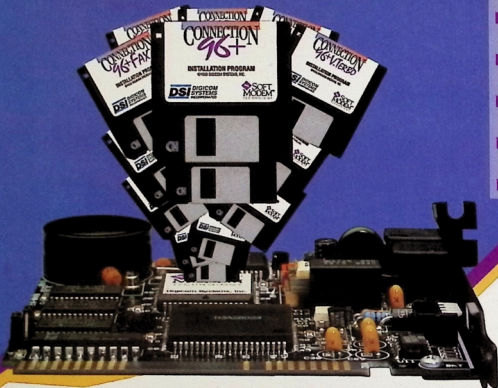




# Connection 96+ Software Upgradeable Modem

## SoftModem™ Technology

- Save money while keeping pace with changing standards
- Upgrade features as needed through software
- Keep up with latest revisions FREE through BBS downloads
- Guaranteed compatibility with all current industry standards
- Five year warranty



From the  
Manufacturer of  
the Award-  
Winning  
ScoutPlus™  
Fax Modem

PC/Computing, June '93



## Your FREE Upgrade To 14,400 bps Is Just The Beginning.



Connection 96+ also includes a Membership Kit  
for Prodigy® Interactive Personal Service.

Thanks to Digicom Systems' exclusive SoftModem™ Technology, Connection 96+ keeps you up-to-date. It's engineered to keep pace with evolving technology, so you don't have to buy a new modem every time you need a new feature. Connection 96+ includes an immediate *free* software upgrade to 14,400 bps. Future upgrades include V.42bis data compression, *send/receive fax* and 19,200 bps data transmission. Connection 96+ lets you buy what you need today and still get what you want tomorrow!

**Connection 96+ Built-In Features:** CCITT V.32 Modulation (9600/4800 bps) • CCITT V.22bis, Bell 212A (2400/1200 bps) • V.42 (LAPM) and MNP 4 Error Control • Built-In Speaker for Line Monitoring • Autobaud and Automatic Speed Negotiation • DTE Speeds up to 115K bps • Flow Control Selection (Xon/Xoff or RTS/CTS) • Configurable COM Ports 1-4, IRQ 3, 4, 5, 9 • Extended AT Command Set • V.54 Test Modes and Diagnostics • 16550 UART Compatibility • FCC Class A/B Approved • Qmodem Lite

**Software Upgradeable Features:** CCITT V.32bis Modulation (14,400/12,000/7200 bps) **FREE** • CCITT V.42bis Data Compression **FREE** • V.32terbo (19,200/16,800 bps de facto standard) • **Send and Receive Fax Now Available!**

... and more.

**DSI** DIGICOM SYSTEMS 800-833-8900  
INCORPORATED

# BOARDWATCH MAGAZINE

*Is Pleased to Announce...*

## THE ONE BBSCON '93

**AUGUST 25-29, 1993**

**BROADMOOR HOTEL, COLORADO SPRINGS, COLORADO**



Don't miss the largest gathering of BBS operators and industry leaders ever assembled. Come meet the pioneers that started the online movement, and the leaders of today's online industry in an intense three-day educational conference covering every aspect of the online world. ONE BBSCON '93 promises to be THE online event of the year - in the shadow of the beautiful Rocky Mountain front range at its most beautiful time of year. Nowhere else will you ever have the opportunity to see as many BBS products in action, talk to the vendors, compare BBS software side-by-side, find the latest in utility programs, modem technology, and see up close virtually every aspect of communicating online with personal computers. Nowhere else will you find such a presentation of technical information you can use to run your own online information service. And nowhere will you find as many BBS operators from around the world gathered under one roof to share experiences, trade war stories, and rub elbows with the stars of the industry.

### ONE Inc. Online Networking Expositions

President, Jack Rickard      Secretary/Treasurer, Philip L. Becker

#### Executive Advisory Board

Jim Harrer, President,  
Mustang Software, Inc.

Dave Hughes Sr., President,  
Old Colorado City  
Communications

Stan Hirschman  
VP Operations, Software Etc.

Fred Clark, President,  
Clark Development Co., Inc.

John C. Dvorak,  
Columnist, PC Magazine

Steven Laliberte  
Director, BIX Online Services

Tim Stryker, President,  
Galacticom, Inc.

Jim C. Warren  
Microtimes/Autodesk, Inc.

Lance Rose, Atty.  
Author, SYSLAW

### 3 Days of Intensive Educational Sessions

Running a BBS for Profit

Connecting Your BBS to the Global Internet

BBS Networking with FidoNet, RIME, ILINK

Offline Mail Readers and Caller Utilities

Legal Aspects of Running an Online Service

Shareware Library Success Roundtable

Social/Chat BBS Success Roundtable

Mail Service BBS Roundtable

Special Topic BBS Roundtable

Product Support BBSs

Company/Corporate BBSs

Third Party Developer Conferences

Presentations on TBBS, PCBoard, Wildeat,

Major BBS, Searchlight, and more.

### Trade Show Exhibit Area

Over one hundred BBS and communications vendors present their latest product introductions for your inspection. Hundreds of special show discount offers on modems, CD-ROMs, and software make this the best "shopping" event in the industry.

### Registration

\$175 until May 1st, 1993

\$250 from May 1st - August 1st

\$325 after August 1st.

ONE BBSCON '93 is limited to 2,000 attendees so register early and often.

On-site registration opens Wednesday afternoon, August 25th, 1993.

Closing session Sunday morning, August 29th, 1993.

Vendor exhibit area open Friday, August 27th, and Saturday, August 28th.

### For Convention Registration and Hotel Reservations

Contact Peg Coniglio at: ONE Inc.  
4255 South Buckley Road, Suite 308  
Aurora, Colorado 80013

**(303)693-5253 Voice**

**(303)693-5518 Fax**

**(303)693-5432 BBS**



The Innovation Continues...

# VERSION 6.1

of The Major BBS

**H**ard at work in sun-swept Florida, our fearless developers have discovered the future of BBSing... EGA/VGA graphics and ANSI together on the same BBS! The Major BBS Version 6.1 gives you the power to create a graphical DOS-based BBS that also supports non-graphics users — *everyone* can use your system.

Our new multi-lingual/multi-protocol architecture lets you easily plug in languages, such as Spanish and French, and alternate presentation protocols like RIPscrip and NAPLPS. You can offer as many as 50 different languages for up to 256 simultaneous users on a single machine. Add new languages with just a couple of keystrokes.

Use our RIPscrip add-on option to give your users dazzling online graphics. The Sysop "paint" tool works directly with The Major BBS configuration utility and lets you draw beautiful scenes and mouse-driven menus. A royalty-free, graphics terminal program is included for distribution to your customers.

Version 6.1 also includes "doors" to a second machine, better MS-Windows support, MHS file attachments, an "upload message" feature in E-mail and Forums, improved security, and much more.

That's just the beginning. Our new Fax/Online add-on lets you integrate fax-mail and fax-server technology into your BBS. And our new Major Gateway/Internet add-on directly ties you into the world's largest message network.

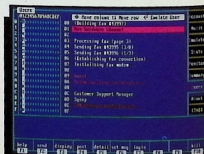
As the competition fades into the sunset, we continue our quest to give you the best BBS in the world. See your local software dealer or call us at 1-800-328-1128.



RIPscrip gives your BBS the dazzling look-and-feel of a graphical system.



Add new languages and presentation protocols — or create your own!



Turn your BBS into a fax/data server with the Fax/Online add-on option.

 GALACTICOMM

4101 SW 47th Ave. • Suite 101 • Ft. Lauderdale, FL 33314  
BBS: (305) 583-7808 • Fax: (305) 583-7846 • Voice: (305) 583-5990